

ICMART

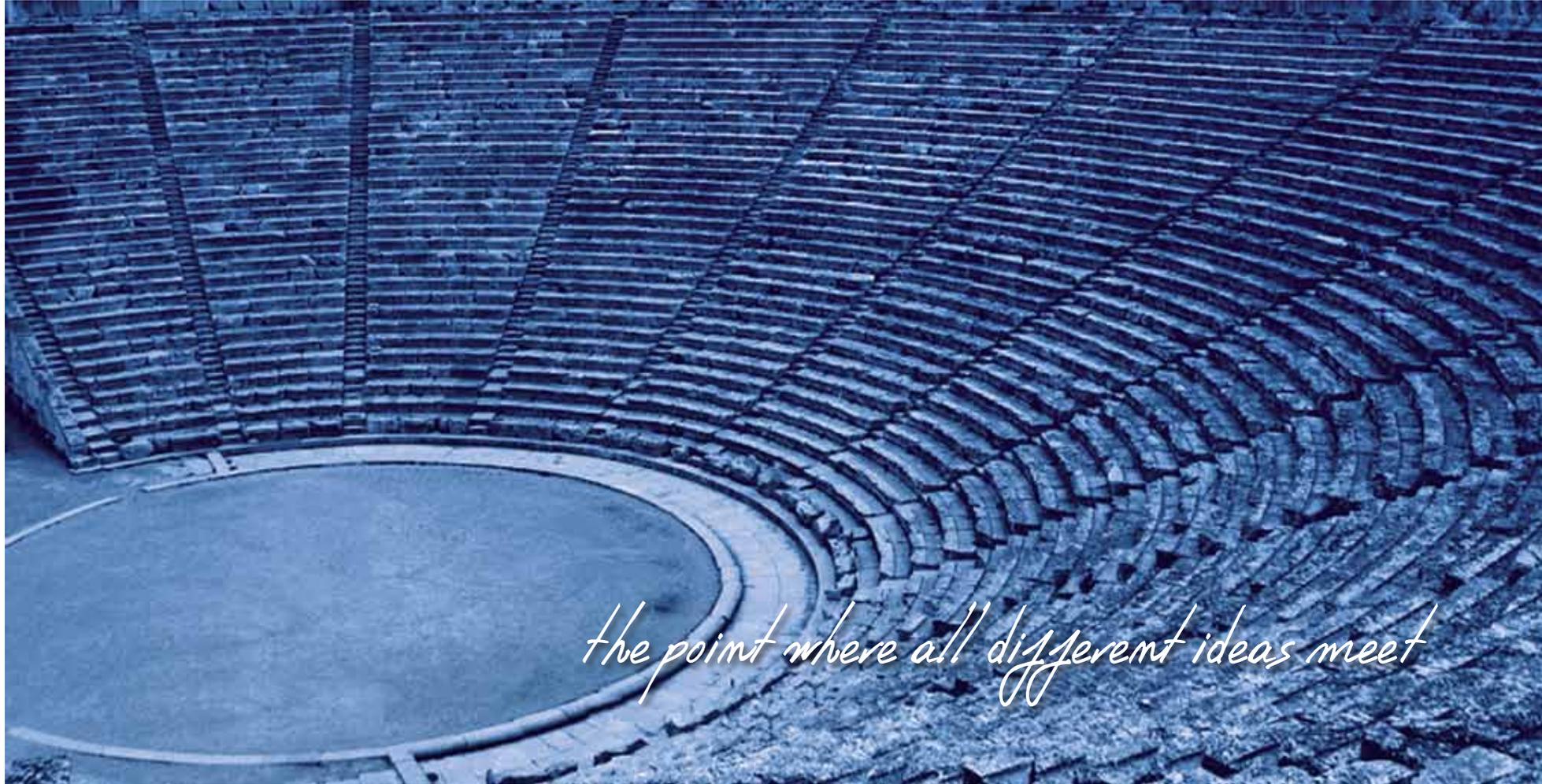


XV WORLD  
CONGRESS  
ON MEDICAL  
ACUPUNCTURE

*the point where all different ideas meet*

25-27 MAY | ATHENS | GREECE 2012





*the point where all different ideas meet*

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## XV WORLD CONGRESS ON MEDICAL ACUPUNCTURE

organized by



[www.icmart.org](http://www.icmart.org)  
[www.samag.gr](http://www.samag.gr)



## Welcome Addresses

### Congress President



Dear Colleagues,

It is with great honor that I welcome you to the XV World Congress on Medical Acupuncture in Greece, to the point where all different ideas meet. A point that appears to be quite similar to the one existed in all ancient Greek amphitheatres and was the source of the best heard sound throughout the whole audience.

This point is revived right here, in the Congress amphitheatre, where we hope that our scientific messages will spread all over the world.

I wish all participants find scientific inspiration, enjoy the exchange of ideas and experiences.

I also wish a memorable stay in Athens to all.

**Konstantina Theodoratou**  
Congress President

### ICMART President



Dear Colleagues,

It is my privilege to welcome you to the ICMART 2012 Congress in Athens, the cradle of Western civilisation and the birthplace of democracy. It is a coming together of East and West with the ancient Eastern art of healing being discussed at a scientific conference in the home of the father of Western medicine, Hippocrates. There will be a mix of clinical papers to provide information relevant to daily practice and research papers to show where the evidence is leading. We welcome you to the Congress of the largest umbrella organisation representing medical acupuncture worldwide.

Enjoy the learning. Enjoy the collegiality. Experience Greece.

Welcome to Athens!

**Chin Chan**  
ICMART President

## ICMART General Secretary



ICMART (International Council of Medical Acupuncture and Related Techniques) and the SAMAG (Scientific Association of Medical Acupuncture Greece) are welcoming you to the XV World ICMART Medical Acupuncture Congress in Athens.

This annual platform of exchange has developed into an important meeting place to obtain current and useful information in science, practice and health policy and is becoming and recognised as the most influential event in Medical Acupuncture worldwide.

Athens will give the Congress its great atmosphere from being the cultural root place of Europe and European medicine, which not only has been the base of European and Western thinking, science and culture, but also had already included many aspects we now are looking for in Eastern Medicine. Greece has built the bridge in both ways.

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Medical Acupuncture is an integrative approach between Western and Eastern medicine and medical technique. It is also a process on which all of us have been actively working on, documented by the history of ICMART since 1983. Starting with a group of pioneers, this umbrella organisation has now grown to about 90 medical acupuncture associations worldwide and has become the number one in Medical Acupuncture.

We welcome you to Athens, to share this innovative process in medicine and medical technique.

On behalf of the ICMART Board,

**Walburg Marić-Oehler**

ICMART General Secretary

## SAMAG Vice President



Dear friends and colleagues,

It is with great pleasure that we welcome you to the XV World Congress on Medical Acupuncture, held from May 25 to May 27 at the Eugenides Foundation, Athens, Greece.

The Congress is organised by SAMAG (Scientific Association of Medical Acupuncture in Greece), under the auspices of ICMART (International Council of Medical Acupuncture and Related Techniques).

The XV Congress will continue the educational activity of the previous congresses with the participation of high level foreign and Greek invited faculty.

The Congress aims to present the latest scientific data on many diseases treated by acupuncture. Distinguished foreign and Greek speakers will transfer their knowledge and experiences through interesting lectures, round tables and workshops, giving rise to constructive dialogue on topical issues.

The presentation of your research activity as well as your presence at the sessions is the key to the success of the Congress.

We hope that this Congress will prove educational and enjoyable to everyone and also that you will have a great time in Athens, the city with the most glorious history in the world, a city worshipped by gods and people, a magical city. The enchanting capital of Greece has always been a birthplace for civilisation. It is the city where democracy and most of the wise men of ancient times were born.

Best regards, and once again we welcome you all to our Congress.

**Georgios Fazakis**

President of Local Scientific Committee  
Vice President of SAMAG

## Scientific Committee



Dear Colleagues,

We are delighted to invite you to attend the XV ICMART World Congress. We believe it will provide a discursive forum in which we will share the acupuncture everyday practice, research and education across the World.

Our aim is to organise a congress programme that will reflect the multidisciplinary character of the acupuncture and the related techniques and will attract practitioners and scientists from different fields and medical backgrounds.

Nearly 100 scientists who were selected to present their work, 11 free workshops, posters and round tables will create the opportunity for our community to interact and discuss current practice and new directions.

Athens in May is a city bathed in sunlight, breathing the air coming from the sea, welcoming people and ideas and inspiring fruitful discussions.

We very much look forward seeing you here!

**Katerina Tsatsou**

Co-Chairman, Local Scientific Committee

## Organisation & Committees

### ICMART Board

President:	<b>Chin Chan</b> (Australia)
Immediate Past President:	<b>Isabel Giralt</b> (Spain)
Honorary President:	<b>François Beyens</b> (Belgium)
General Secretary:	<b>Walburg Marić-Oehler</b> (Germany)
Vice Presidents:	<b>Helena Pinto Ferreira</b> (Portugal) <b>Helmut Liertz</b> (Austria) <b>Bryan Frank</b> (USA)
Treasurer:	<b>Konstantina Theodoratou</b> (Greece)
Directors-at-large:	<b>Nickolay A. Nickolaev</b> (Latvia) <b>Jacqueline Filshie</b> (UK) <b>Michael Hammes</b> (Germany) <b>Petja Piehler</b> (Austria) <b>Mehmet Abut</b> (Turkey) <b>Patrick Sautreuil</b> (France) <b>Flavio Dantas</b> (Brazil)
Education Chapter:	<b>Marshall Sager</b> (USA)
European Chapter:	<b>Walburg Marić-Oehler</b> (Germany)

### Congress Presidents

ICMART President:	<b>Chin Chan</b> (Australia)
SAMAG President:	<b>Konstantina Theodoratou</b> (Greece)

### Organising Committee

SAMAG Chairman:	<b>Konstantina Theodoratou</b> (Greece)
Co-Chairman:	<b>François Beyens</b> (Belgium)
Members:	<b>Georgios Fazakis</b> (Greece) <b>Anthi Papanikolaou</b> (Greece) <b>Katerina Tsatsou</b> (Greece) <b>Katerina Patsiou</b> (Greece) <b>Walburg Marić-Oehler</b> (Germany)

### Local Scientific Committee

Chairman:	<b>Giorgos Fazakis</b>
Co-Chairman:	<b>Konstantina Theodoratou</b> <b>Katerina Tsatsou</b>
Members:	<b>Charisios Karanikiotis</b> <b>Miltiadis Karavis</b> <b>Ioanna Kazali</b> <b>Ilias Konstantinidis</b> <b>Argiris Makris</b> <b>Christos Markopoulos</b> <b>Anthi Papanikolaou</b> <b>Gerasimos Papathanasiou</b> <b>Amalia Parousi</b> <b>Dimitrios Vasilakos</b>

### International Scientific Committee

**Francesco Ceccherelli**  
**Mike Cummings**  
**Flavio Dantas**  
**Pierre Jean Fossion**  
**Isabel Giralt**  
**Michael Hammes**  
**Dominik Irnich**  
**Helmut Liertz**  
**Francesc Minguell Martin**  
**Nickolay Nickolaev**  
**Richard Niemtzw**  
**Wolfgang Ortner**  
**Patrick Sautreuil**  
**Koosnadi Saputra**

### International Honorary Committee

<b>Essertas Aris</b>	<b>Wolfgang Ortner</b>
<b>Steven Aung</b>	<b>Hong Jin Pai</b>
<b>Ondrej Bangha</b>	<b>Petar Papuga</b>
<b>Tiberiu Brenner</b>	<b>Gustavo Quaresma</b>
<b>Christer Carlsson</b>	<b>Motti Ratmanský</b>
<b>Francesco Ceccherelli</b>	<b>Krunoslav Reljanovic</b>
<b>Konstantin Cheremkhin</b>	<b>Palle Rosted</b>
<b>Dumitru Constantin</b>	<b>Susanna Schreiber</b>
<b>Abdulkadir Erengul</b>	<b>Noriko Shimizu</b>
<b>Ladislav Fildan</b>	<b>Trygve Skonnord</b>
<b>Jean Pierre Fossion</b>	<b>Jozef Smirala</b>
<b>Albert Garcia i Janeras</b>	<b>Tatiana Solomonidou</b>
<b>Vasylyi Goidenko</b>	<b>Lucio Sotte</b>
<b>Gabriella Hegyi</b>	<b>Oswaldo Sponzilli</b>
<b>Emil Iliev</b>	<b>Hartati Sukarto</b>
<b>Seppo Y.T. Junnila</b>	<b>Ruy Tanigawa</b>
<b>Ruth Kirkeby</b>	<b>Guy Vinandy</b>
<b>Ljubica Konstantinovic</b>	<b>Rainer Wander</b>
<b>Elsebeth Lægaard</b>	<b>Piotr Wozniak</b>
<b>Malle Lilleberg</b>	<b>T. Yamamoto</b>
<b>Hedi Luxenburger</b>	<b>Yves Rouxville</b>
<b>Joseph Mezei</b>	
<b>Christian Mougialis</b>	
<b>Richard Niemtzw</b>	
<b>Helmut Nissel</b>	
<b>Diarmaid O'Connell</b>	
<b>Gayle O'Duffy</b>	
<b>C. L. Oei-Tan</b>	
<b>Yoshiaki Omura</b>	

## General Information

### Name Badge

Each participant will receive a name badge upon check-in at the **Registration Desk**. The badge will be the official Congress document and should be worn at all times in order to gain access into the Congress halls. Please note that access will not be possible into any of the Congress areas without an official badge.

### Currency / Credit Cards / Banking

All Congress fees are calculated in **Euro (€)**. Foreign currency, traveler's cheques, and Eurocheques can be exchanged at the airport bank upon arrival or at banks located throughout Athens. Exchange offices and ATMs are available throughout Athens. Local banks and hotels in Athens will not cash personal cheques. Participants are advised to bring cash, traveler's cheques or Eurocheques. Major credit cards are accepted in Athens. Banks are open to the public from Monday to Friday, 08:00-14:00 hrs.

### ICMART General Assembly

The ICMART General Assembly will take place on **Saturday, May 26, 2012** at **14:00-15:00** hrs in the **Congress Amphitheatre**.

### Congress Registration

REGISTRATION CATEGORY	FEE
Physicians	€ 490
Physicians - Members of Greek Acupuncture Associations	€ 450
Veterinarians	€ 250
Gala Dinner ticket	€ 75

#### Registration fees include:

- Admittance to the Opening Ceremony and Welcome Reception, as well as the Closing Ceremony
- Admittance to all scientific sessions
- Admittance to the exhibition
- Congress documentation
- Certificate of Attendance
- Coffee, refreshments and light lunch during official Congress breaks

### Registration and Information Desk

The Registration Desk will be located in the **Eugenides Foundation** and it will be operating according to the following timetable:

Friday, May 25 08:00-19:00

Saturday, May 26 08:30-19:00

Sunday, May 27 08:30-13:00

### Congress Venue

#### Eugenides Foundation

387, Syggrou Av., 175 64 P. Faliro, Athens, Greece

T: +30 210 9469600 • F: +30 210 9417372 • [www.eugenfound.edu.gr](http://www.eugenfound.edu.gr)

### Congress Organising Bureau

#### ERASMUS CONFERENCES TOURS & TRAVEL S.A.

1, Kolofontos & Evridikis Str., 161 21 Athens, Greece

T: +30 210 7414700 • F: +30 210 7257532 • [www.erasmus.gr](http://www.erasmus.gr)

### Insurance

Neither the Local Organising Committee nor the Congress Secretariat accept any liability for damages and/or losses of any kind which may incur to the Congress participants or to any persons accompanying them, during both the official activities and excursions. Participation in all tours and events is at one's own risk. Participants are advised to take out insurance against loss, accidents or damage that could be incurred during the Congress. Verbal agreements will not be binding unless they are confirmed in writing. Sole place of jurisdiction is Athens. Greek law is applicable.

### Mobile Phones

Use of mobile phones is strictly prohibited within the scientific session halls. Please make sure you have your mobile phone switched off when attending.

### Coffee Breaks & Light Lunch

Coffee and light lunch will be served to all registered Congress participants during the official coffee and lunch breaks of the Congress.

## Social Events

### Welcome Reception

**Friday, May 25, 2012 • 20:00 hrs**

Registered participants are cordially invited to attend the **Welcome Reception**, which will be held at the **Metropolitan Hotel** (located next to Congress venue).

Dress: **Smart Casual**

Free for registered participants

### Gala Dinner

**Saturday, May 26, 2012 • 21:00 hrs**

Registered participants are cordially invited to attend the **Gala Dinner**, which will be held at the **Balux**, a venue reminiscent of an exotic island getaway in view of the unique blue of the Greek sea. Transportation from the Congress venue will be provided.

Dress code: **Lounge Suit or Cocktail Dress**

Cost per person: **€ 75**

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As the capacity of the venue is limited, we kindly advise you to purchase your tickets in advance from the Congress Secretariat the latest by Friday, May 25, at 15:00 hrs.

## Scientific Information

### Speakers Preview Area

All session rooms are equipped with computer projectors. To ensure a successful Congress, speakers are asked to have their presentations delivered to the Speakers Preview Area in a timely manner; thus, presentations must be delivered at least 2 hours before the beginning of the session, or the day before for early morning sessions.

### Posters

Posters will be displayed in the Poster Area of the Congress Venue. All posters should be mounted in their assigned board on Friday, May 25, 2012 from 08:00 to 10:00 hrs and dismounted on Sunday, May 27, 2012, from 12:00 to 13:00 hrs. The Organising Bureau has no responsibility for posters not removed within the aforementioned time-frame.

Tape to mount your poster will be provided by the Congress Secretariat. The

Congress Secretariat will be at your disposal to answer your questions and provide help in locating your poster board.

**Poster Presentations Session:** Saturday, May 26, 2012 at 17:00-17:30 hrs

Chairs: **J. Fossion** (Belgium) - **G. Fazakis** (Greece)

Presenting authors are kindly requested to be present in the poster area during the Session, in order to support their posters.

### Language

**English** is the official language of the Congress.

### Certificate of Attendance

Registered participants will receive a **Certificate of Attendance** from the Congress Secretariat on Monday, May 27, 2012 between 10:00-13:00 hrs.

### CME - Continuing Medical Education

The "XV World Congress on Medical Acupuncture" is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS): [www.uems.net](http://www.uems.net).

The "XV World Congress on Medical Acupuncture" is designated for a maximum of **15 hours of European external CME credits**. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity. EACCME credits are recognized by the American Medical Association towards the Physician's Recognition Award (PRA). To convert EACCME credit to AMA PRA category 1 credit, contact the AMA.

### Awards

Speakers participating in the Congress will be evaluated for the following awards:

- Most active person of the Congress
- Most original subject of the Congress
- Most well documented paper of the Congress

Awards Committee: **W. Maric-Oehler** (Germany), **K. Theodoratou** (Greece), **G. Fazakis** (Greece)

The awards will be presented during the Closing Ceremony of the Congress.

## Acknowledgements

The Organising Committee would like to thank the following companies for their generous support of the XV World Congress on Medical Acupuncture:

The logo for hwato.gr, featuring the text "hwato.gr" in a green, lowercase, sans-serif font.

Hwato Greece

The logo for ANERCIA, consisting of the word "ANERCIA" in white uppercase letters on a teal rectangular background, with the tagline "...energy inside you" in a smaller, italicized font below it.

Serinth

ACUPUNCTURE &  
PHYSIOTHERAPY  
ITME Ltd.

ITME

The logo for LIFEWAVE, featuring the word "LIFEWAVE" in blue uppercase letters with a blue wave graphic underneath.

Biomedicin

ICOM 2012

The logo for Fitochina Italia, featuring a stylized orange and green flame-like graphic to the left of the text "Fitochina Italia" in green.

Fitochina Italia Srl

British Medical  
Acupuncture Society

The logo for mastishop, featuring the text "mastishop" in white lowercase letters on a black rectangular background, with a small tagline below it.

ELMA

The logo for Skouras, featuring a stylized green and black yin-yang symbol with acupuncture needles, above the Greek text "σκούρας" and "ΕΙΣΗ ΒΡΑΧΙΟΝΙΜΟΥ ΙΑΤΡΙΚΑ ΕΙΔΗ".

Skouras





S C I E N T I F I C P R O G R A M M E

08:45 - 11:00	08:45-09:30	<b>Opening Ceremony</b>
		<b>Chairs:</b> <i>C. Chan (Australia) – K. Theodoratou (Greece)</i>
	09:30-10:00	1 - Circling the dragon – Does the fire still breath? <i>D. Irnich (Germany)</i>
	10:00-11:00	2 - The impact of acupuncture in IVF. <i>M. Karavis N. Chairetakis, M. Segredou, G. Fazakis, K. Theodoratou (Greece)</i>
	11:00-11:30	<b>Coffee Break - Posters - Exhibition</b>
11:30 - 13:30		<b>Chairs:</b> <i>C. Chan (Australia) – M. Karavis (Greece)</i>
	11:30-12:30	3 - Classical acupuncture and its relevance to the modern physician. <i>E. Neal (USA)</i>
	12:30-13:00	4 - Topographic-physiological acupuncture by polyneuropathy. <i>A. Pollmann (Germany)</i>
	13:00-13:30	<b>Highlights - K.Theodoratou (Greece)</b>
	13:30-15:00	<b>Lunch Break - Poster Viewing - Exhibition</b>
		<b>Chairs:</b> <i>D. Irnich (Germany) – H. Pinto Ferreira (Portugal)</i>
15:00 - 17:00	15:00-15:20	10 - Response to acupuncture stimulation as registered by MRI and EEG: Possibilities of documentation. <i>A. Santana (Brazil)</i>
	15:20-15:40	11 - An integrated survey of Chinese pulses: An easy diagnostic overview of the patient's complaints at your fingertips. <i>J. Fossion (Belgium)</i>
	15:40-16:00	12 - The holistic effect of Qi on pulse shape and heart rate variability in elderly: A clinical trial research protocol. <i>R. Fossion (Mexico)</i>
	16:00-16:20	13 - Topographic-Physiological acupuncture in the musculoskeletal system. <i>A. Pollmann (Germany)</i>
	16:20-16:40	14 - Use of traditional medicine to aid victims of 2011's great east Japan earthquake diagnosis from the traditional point of view to aid victims of future disasters - A case series. <i>S. Takashi (Japan)</i>
	16:40-17:00	15 - Biomechanical approach related to meridians and myofascias; Biomechanical acupuncture. <i>S. Cho (Korea Republic)</i>
	17:00-17:30	<b>Coffee Break - Posters - Exhibition</b>
17:30 - 19:45		<b>Chair:</b> <i>W. Marić-Oehler (Germany)</i>
	17:30-19:15	<b>Workshop 3: Introduction to classical channel theory.</b> <i>E. Neal (USA)</i>
	19:15-19:45	<b>Highlights - J.P.J.Fossion ( Belgium)</b>
	20:00	<b>Welcome Reception</b>

## HALL A

## HALL B

11:30-13:00

Chair: *G. Fazakis (Greece)*

**Workshop 1: Cosmetic acupuncture.**  
*R. Thambirajah (UK)*

15:00-17:00

Chair: *K. Tsatsou (Greece)*

**Workshop 2: FACE (Facial Acupuncture for charm and elegance)**  
- *S.H. Lee (Korea Republic):*  
Introduction of F.A.C.E.  
- *C.-Y. Coussinoux (France):*  
Clinical application of F.A.C.E.  
- *J.H. Soong (Korea Republic):*  
F.A.C.E. (Mechanism, indication) and demonstration

17:30-19:00

Chair: *I. Giralt (Spain)*

**Workshop 4:**  
7 steps in patterns discrimination and treatment of primary natural enuresis.  
*N.A. Nickolaev (Latvia)*

11:30-12:00

12:00-12:30

12:30-12:40

12:40-12:50

12:50-13:00

15:00-15:30

15:30-15:50

15:50-16:10

16:10-16:30

16:30-17:00

17:30-17:45

17:45-18:00

18:00-18:10

18:10-18:20

18:20-18:30

18:30-18:40

18:40-18:50

18:50-19:00

19:00-19:15

### VET ACUPUNCTURE

Chair: *F. Longo (Italy) – K. Loukaki (Greece)*

5 - Gold-bead acupuncture in arthrosis. *E. Schulze (Germany)*

6 - Gold bead implants in invalidant osteoarthritis: 10 years of clinical experience in Canines. *F. Minguell (Spain)*

7 - Veterinary acupuncture and veterinary homeopathy. *K. Loukaki (Greece)*

8 - Acupuncture application in Iguana. *P. Papaioannou (Greece)*

9 - Veterinary acupuncture in Indonesia. *K. Saputra (Indonesia)*

Chairs: *F. Minguell (Spain) – M. Patsiou (Greece)*

16 - Scientific bases of veterinary acupuncture. *F. Longo (Italy)*

17 - Acupuncture for horses. *M. Gazzola (Italy)*

18 - The peculiarities of Acupuncture in cats. *D. Schmitt (France)*

19 - Traditional Chinese medicine in equine practice. *F. Longo (Italy)*

20 - Acupuncture and TCM for dogs. *F. Minguell (Spain)*

### ACUPUNCTURE AND RELATED TECHNIQUES

Chairs: *M. Hammes (Germany) - K. Saputra (Indonesia)*

21 - The ground as a manifestation beneath the external pathology of wood element. *J. Mezei (Romania)*

22 - Acupuncture as a therapeutic modality of pemphigus vulgaris. *E. Iliev (Bulgaria)*

23 - Moxibustion (metsa) in Tibetan medicine. *S. Maric (Germany)*

24 - A randomized controlled trial for the use of qigong in the treatment of pre and mild essential hypertension.  
*J. E. Park (Korea Republic)*

25 - Bioelectricity circulatory system as the 9th system of human body. *D. Sukarto (Indonesia)*

26 - Treating Hashimoto's disease with acupuncture plus psychotherapy. *S. Elenkova (Bulgaria)*

27 - Moxibustion for pre & stage I hypertension: A pilot randomized controlled open trial. *K. Shin (Korea Republic)*

28 - Consumption of ephedra1-containing CHP does not increase the occurrence of CVD: A population-based study.  
*L. Yi-chun (Taiwan)*

29 - A study of factors influencing the DEQI sensation in acupuncture. *S.D. Lee (Korea Republic)*

09:00 - 11:00	09:00-09:30	Chairs: <i>H. Liertzer (Austria) – Ch. Karanikiotis (Greece)</i> 30 - An anti-inflammatory pathway that can explain the role of acupuncture in immune homeostasis. <i>M. Karavis (Greece)</i>
	09:30-10:00	31 - In search of the one needle cure - The assessment and treatment of myofascial trigger point pain. <i>M. Cummings (UK)</i>
	10:00-10:30	32 - Contralateral acupuncture in the treatment of neuropathic pain. <i>F. Ceccherelli (Italy)</i>
	10:30-11:00	33 - Postoperative electroacupuncture analgesia. The Greek study. <i>D. Vasilakos (Greece)</i>
	11:00-11:30	<b>Coffee Break - Poster Viewing - Exhibition</b>
11:30 - 13:30	11:30-12:00	Chairs: <i>F. Ceccherelli (Italy) – D. Vasilakos (Greece)</i> 34 - Clinical experiences in analgesic therapy according to a new diagnostic-Therapeutic model of auricular acupuncture. <i>G. Bazzoni (Italy)</i>
	12:00-12:15	35 - Acupuncture treatment of low back pain. <i>C. Chan (Australia)</i>
	12:15-12:30	36 - Use of the recurrence graphs on the evaluation of acupuncture treatments. <i>A. Sant'ana (Brazil)</i>
	12:30-12:45	37 - Meridian bioresonance with organotropic regulation for anxiety management. <i>D. Zagklis (Greece)</i>
	12:45-13:00	38 - Effective needles acupuncture using crystal light therapy (dielectric resonance). A new complimentary treatment modality? <i>M.F. Tarabe (Greece)</i>
	13:00-13:30	Highlights - <i>G. Fazakis (Greece)</i>
	13:30-15:00	<b>Lunch Break - Poster Viewing - Exhibition</b>
14:00-15:00	<b>General Assembly</b>	
15:00 - 17:00	15:00-15:15	Chairs: <i>A. Sant'ana (Brazil) - T. Gatzounis (Greece)</i> 43 - Gender features of pain syndromes in dorsopathies. <i>I.A. Moseykin (Russia)</i>
	15:15-15:30	44 - Complex therapy for the treatment of ovarian cysts. <i>L. Luzina-chju (Russia)</i>
	15:30-15:45	45 - Acupuncture protocol of chronic cervical syndrome. <i>T. Gatzounis (Greece)</i>
	15:45-16:00	46 - The contribution of acupuncture and nutritional rehabilitation in herpes zoster. <i>A. Parousi (Greece)</i>
	16:00-16:15	47 - The influence of a repeated acupuncture treatment on intraocular pressure and the compliance of patients with primary open-angle glaucoma – first results of long term prospective follow-up study. <i>H. Ewert (Germany)</i>
	16:15-16:30	48 - Benefit of acupuncture as treatment of male sexual dysfunction. <i>K. Saputra (Indonesia)</i>
	16:30-16:45	49 - The role acupuncture to support osteoporotic treatment of the spine. <i>K. Saputra (Indonesia)</i>
	16:45-17:00	50 - A medical acupuncture approach to post concussion syndrome/mild traumatic brain injury. <i>G. Chemish (Canada)</i>
	17:00-17:30	<b>Coffee Break - Exhibition</b>
	17:00-17:30	<b>Poster Presentation Session</b>
17:30 - 19:45		<b>LASER ACUPUNCTURE</b>
		Chairs: <i>P. Sautreuil (France) – H. Luxenburger (Germany)</i>
	17:30-17:45	52 - A comparative study on thermal characteristics by the strength of laser stimuli in tissue models. <i>K. Shin (Korea republic)</i>
	17:45-18:00	53 - Near-infrared spectroscopy for objectifying cerebral effects of laserneedle acupuncture in term an preterm infants. <i>W. Raith (Austria)</i>
	18:00-18:15	54 - Laser acupuncture in children and adolescents with asthma. <i>T.-C. Pan (Taiwan)</i>
	18:15-18:30	55 - Meridian visualization by infrared light. <i>S.-H. Yi (Korea Republic)</i>
	18:30-19:00	56 - Low level IR-laser acupuncture and therapy-The high regulatory treatment. <i>O. Mastalier (Germany)</i>
	19:00-19:15	57 - Laserneedle acupuncture in daily practice. <i>R.D. Hadisantoso (Indonesia)</i>
19:15-19:45	Highlights - <i>F.Minguell (Spain)</i>	
21:00	<b>Gala Dinner</b>	

## HALL A

## HALL B

- 11:30-12:30 **Chair: J. P.J.Fossion (Belgium)**  
**Workshop 5: Acupuncture without TCM - Topographic - Physiological Acupuncture.**  
*A. Polimann (Germany)*
- 12:30-13:00 39 - Cerebral Neurocircuitry and acupuncture interactions. *K. Theodoratou (Greece)*

- 15:00-15:15 **Chair: E. Neal (USA)**  
 51 - Acupuncture needling and the neural correlates using fMRI. *S. Harres (Brazil)*
- 15:30-17:00 **Workshop 6: Triggerpoint acupuncture (dry needling).** *D. Imich (Germany)*

- 17:30-19:00 **Chair: M. Cummings (UK)**  
**Workshop 8: Post-traumatic stress disorders in medical practice – An integrative east-west psychosomatic approach.** *W. Marić-Oehler (Germany)*

### NEURAL THERAPY

- Chair: M. Karavis (Greece) – G. Fazakis (Greece)**
- 11:30-12:00 40 - Stress-parainflammation-extracellular matrix-depression: Can the interference field be the common link?  
*G. Papathanasiou (Greece)*
- 12:00-12:30 41 - Neural therapy on acupoints - Why, when and how to do. *H. Steurer (Austria)*
- 12:30-13:00 42 - Quick and efficient steps in neural therapy. *W. Ortner (Austria)*

- Chairs: P. Piehler (Austria) – K. Tsatsou (Greece)**
- 15:00-17:00 **Workshop 7: Obstacles in therapy: interference fields and the contribution of neural therapy to clinical success**  
*R. Wander (Germany): Neural Therapy for acupuncture non-responders. The importance of the interference field tooth*  
*G. Papathanasiou (Greece): Stress-Parainflammation-Extracellular Matrix-Depression: Can the interference field be the common link?*  
*H. Steurer (Austria): Neural Therapy on Acu-Points: Why, when and how to do it*  
*W. Ortner (Austria): Quick and efficient steps in Neural Therapy*

### AURICULAR THERAPY

- Chairs: I. Giralt (Spain) - M. Abut (Turkey)**
- 17:30-18:00 58 - Segmental treatment in pain syndromes in auriculotherapy: Clinical significance of the border of the helix.  
*J.P.J. Fossion (Belgium)*
- 18:00-18:30 59 - Auricular acupuncture and integrated therapy of obesity. *G. Bazzoni (Italy)*
- 18:30-19:00 60 - Leptin, Ghrelin, TNF- $\alpha$  before and after hypo-caloric traditional Chinese medicine and auricular acupuncture.  
*A. Liguori (Italy), E. Moustakakis (Greece)*

09:00 - 11:00

**Chair:** *G. Fazakis (Greece) - R. Wander (Germany)*

- 09:00-09:10 61 - Acupuncture in tension-type headache in pregnancy. *J.B.G Silva (Brazil)*
- 09:10-09:20 62 - Cosmetic acupuncture. *A. Kaplan Algin (Turkey)*
- 09:20-09:30 63 - The influence of needling point Cheng Jiang -CV24 in sedating a. the pharyngeal reflex and b. reducing hypersalivation. *A. Tsirigoti (Greece)*
- 09:30-09:40 64 - Non-pharmacological treatment of chronic vertebrobasilar insufficiency. *V. Tyan (Russia), K. Tsatsou (Greece)*
- 09:40-09:50 65 - Acupuncture for improving chronic sinusitis complicated with headache. *T. Gatzounis (Greece)*
- 09:50-10:30 66 - The piriformis syndrome: A common polyradicular ischialgia (L5-S1-S2) treatable with auriculotherapy as entrapment syndrome within the muscular floor of the basin. *J.P.J. Fossion (Belgium), G. Fazakis (Greece)*
- 10:30-11:00 67 - Neuro-acupuncture and rehabilitation medicine. *P. Sautreuil (France)*

**11:00-11:30 Coffee Break – Poster Viewing – Exhibition****STATISTICS AND ACUPUNCURE****Chairs:** *F. Minguell (Spain) – K. Tsatsou (Greece)*

- 11:30-11:45 76 - Innovative technologies to quantify TCM observables: A geriatric bracelet for continuously monitoring life signals.  
*R. Fossion, B.A. Morales Ruiz (Mexico)*
- 11:45-12:00 77 - What really matters in acupuncture - A multi-method approach for an intercultural comparison between China, Argentina, and Germany  
*P. Baeumler (Germany)*
- 12:00-12:15 78 - Acupuncture treatments in assisted reproduction – Results from a survey of fertility centers in Switzerland, Germany, and Austria  
*B. Ausfeld (Switzerland)*
- 12:15-12:40 79 - Clinical acupuncture applications in human and animals, is there a common point?  
*F. Minguell (Spain), K. Theodoratou (Greece)*
- 12:40-13:30 Interactive: Acupuncture around the world. *K. Tsatsou (Greece)*

13:30-14:00 **Highlights** - *K. Tsatsou (Greece)***14:00-14:30 Closing Ceremony - Awards - Announcement of ICMART Congress 2013 in Vienna**

11:30 - 14:00

## HALL A

09:00-11:00

Chair: *E. Neal (USA)*

**Workshop 9:** How microsystems acupuncture points correlate with auch (awareness under conscious hypnosis) method.

*A.O. Ozturk (Turkey)*

*H.A. Nogay (Turkey)*

11:30-12:15

Chair: *M.F. Tarabe (Greece)*

**Workshop 10:** New modern trends and devices for informational stimulation and research of acupuncture meridians and points.

*J. Mezei (Romania):* Informational stimulation

*D. Mezei (Romania):* New modern trends

*K. Dillinger (Austria)*

*F. Hinterhofer (Austria)*

12:15-13:30

**Workshop 11:** The TCM-CAO method, a combined treatment of weight excess and obesity with Chinese diet, auriculotherapy and homeopathy.

*A. Linguori (Italy),*

*E. Moustakakis (Greece)*

*L. Silli (Italy), R. Rinaldi (Italy)*

## HALL B

### ELECTRO ACUPUNCTURE

Chair: *A. Pollmann (Germany) - O. Mastalier (Germany)*

09:00-09:15

68 - Post herpetic neuralgia managed with high frequency electroacupuncture. *C. Chan (Australia)*

09:15-09:30

69 - Electroacupuncture at "forbidden points" in pregnant wistar rats' health. *J.B.G Silva (Brazil)*

09:30-09:45

70 - Electric acupuncture and inflammatory disease –Neuro immune evidence. *P. Figueiredo (Portugal)*

09:45-10:00

71 - Treatment of macular degeneration with electro-acupuncture. *O.N. Firatli (Turkey)*

### CLINICAL ACUPUNCTURE

10:00-10:15

72 - The dynamics of cognitive impairment in patients with chronic vertebrobasilar insufficiency.

*V. Than (Russia), K. Tsatsou (Greece)*

10:15-10:30

73 - Reflexotherapy in the complex treatment of birth plexitis. *V. Alexandrov (Russia), K. Tsatsou (Greece)*

10:30-10:45

74 - Investigate reflexotherapy influence on humoral non-specific defence.

*I. Rudenko, I. Moseykin (Russia), K. Tsatsou (Greece)*

10:45-11:00

75 - A holistic approach in dentistry. *M. Kolyvaki (Greece)*

Chairs: *H. Pinto Ferreira (Portugal) - P. Piehler (Austria)*

11:30-12:00

80 - The application of modern meriDiM meridian diagnostics in energy medicine, in the practice of acupuncture and in scientific research. *I. Szechenyi, D.F. Valki (Hungary)*

12:00-12:30

81 - A concise chinese clinical synopsis supplemented with suggestions for treatment according the deadman-AI Khajafi manual. *J.P.J. Fossion (Belgium)*

12:20-13:00

82 - Bridging the gap between western and traditional Chinese medicine: Quantifying the qualitative, and making the static dynamical. *R. Fossion (Mexico)*

## Poster Presentations Catalogue

Poster Presentations Session: Saturday, May 26 at 17:00-17:30 hrs

Chairs: J.P.J. Fossion (Belgium) - G. Fazakis (Greece)

### ACUPUNCTURE MEETS WEST

1 *Effects of real and sham auricular stimulation on anxiety status in healthy volunteers. Blind crossover study vs. placebo. Preliminary data*  
G. Gagliardi, M. Meneghetti, S. Gastaldello, F. Ceccherelli

2 *The immediate effect of 3 different electroacupuncture protocols on fasting blood glucose in obese patients - A pilot study*  
M. Belivani, T. Lundeberg, M. Cummings, C. Dimitroula, N. Belivani, D. Vasilakos, A.I. Hatzitolios

3 *Interference field tooth - Acupuncture non responders*  
R. Wander

4 *Effects of electroacupuncture intensity on heart rate variability and galvanic skin response in patients with chronic tension type headache*  
D.-H. Li, K.M. Park, S. Lee

5 *Influence of acupuncture on biological and morphological data of osteointegration in system maxilla-dental implant. Experimental case*  
I. Pohodenko-Chudakova, L. Pashkevitch, T. Shevela, E. Oganova

6 *Reduction of Sol. Lidocaini chronic toxicity with acupuncture according to the morphometric examination data*  
I. Pohodenko-Chudakova, E. Maksimovitch, S. Kuralenya

7 *Influence of acupuncture on cerebral blood flow in case of carotide stenosis*  
Y.E. Shnaider, M.V. Tardov, O.G. Bugrovetskaya

8 *Neurodegenerative disease and acupuncture*  
P.B. Castro Figueiredo, M.I. Costa Lopes

9 *Electric acupuncture and neurodegenerative disease*  
P.B. Castro Figueiredo, M.I. Costa Lopes

10 *Electric acupuncture. Immune neuro endocrin axis and inflammatory disease neuro immune evidence*  
M.I. Costa Lopes, P.B. Castro Figueiredo

11 *Electric acupuncture and stroke*  
P.B. Castro Figueiredo, M.I. Costa Lopes

### ACUPUNCTURE MEETS EAST

12 *Effects of bloodletting therapy on peripheral facial paralysis: A retrospective study*  
Y.-j. Kwon, S. Lee, S. Park, U. Lee, S.-K. Lim, D. Nam, S. Lee

13 *Study on the efficacy of electro-acupuncture with chinese herbal medicine in hospitalized stroke patients*  
C.-y. Lee, T.-C. Pan, H.-C. Chang

14 *Moxibustion for knee osteoarthritis: A protocol for a pilot randomized controlled trial*  
S. Lee, K.h. Kim, T.-H. Kim, J.-E. Kim, J.-H. Kim, K.-W. Kang, S.-Y. Jung, A.-R. Kim, H.-J. Park, M.-S. Shin, K.-E. Hong, S.-M. Choi

## Poster Presentations

15 *The training of the individual system for control of body weight, hunger, feeling of fullness using the acupuncture*  
L. Tikhomirova

### ACUPUNCTURE MEETS VETS

16 *Veterinary acupuncture: Big animal, but rapid responses - Elephant*  
S.K.H. Aung

17 *Veterinary acupuncture: The most energetically sensitive animal - Horse*  
S.K.H. Aung

18 *Experimental application of acupuncture in a turtle*  
P. Papaioannou, S. Harlaftis

### ACUPUNCTURE MEETS STATISTICS

19 *Acupuncture for inpatients in general hospitals – A road map*  
M. Saad, R. de Medeiros

20 *Traditional Korean medicine practitioners' awareness of and demands for the case report*  
S.m. Baek, J.H. Park, L. Sang-Hun, S.G. Kim, J.H. Lee, B.y. Kim, Kyungmin Shin, Soyoung Jung, S.M. Choi

21 *Acupuncture for treating dry eye*  
M.-S. Shin, J.-I. Kim, M.S. Lee, K.-H. Kim, J.-Y. Choi, K.-W. Kang, S.-Y. Jung, A.-R. Kim, S.-M. Choi, T.-H. Kim

22 *Review of acupuncture treatment for hypertension in clinical trials*  
S.-Y. Jung, J.-E. Park, J.-E. Kim, A.-R. Kim, S.-M. Choi, K. Shin

23 *Effect of acupuncture on the treatment of subfertile men*  
Cui Shu Li, Hum Siew Chen, Ho Lee Mee, Johnny Foo Qi Ming, Yong Tze Tein, Stephanie Fook-Chong Mun Chung, Amy Lee Shaw Ni, Chong Shaw Fong, Geng Man, Loh Kim Gek, Loh Kin Yee, Yu Su Ling

24 *Saam acupuncture for functional dyspepsia: An ongoing randomized, controlled pilot clinical trial protocol*  
J.-H. Kim, S.-H. Lee, S.-Y. Jung, S.-M. Choi

25 *National curriculum of physicians in the specialty "Reflexology" in the Russian Federation*  
V.S. Goydenko, V.N. Tyan, K. Tsatsou

26 *Acupuncture treatment in refractory post traumatic brain injury (TBI) headache in adults. Three to 26 months follow-up in a trauma center: Prospective preliminary experience*  
F.B. Bates





B O O K O F A B S T R A C T S

### W1

#### **Cosmetic acupuncture**

**R. Thambirajah** (UK)

Cosmetic Acupuncture is a treatment using Acupuncture, Cupping Therapy, Gua Sha therapy, Plum-blossom needling and Laser therapy in order to treat Sagging skin, fine and deep wrinkles, cellulite, skin pigmentation problems, Hyperhidrosis, improving breast size, obesity, alopecia and other cosmetic problems.

This can be achieved using such simple treatment methods because Cosmetic Acupuncture is primarily NOT about beauty but about HEALTH.

It is based on the principle that if one is in good health, their energies are in balance and if they are happy and enjoy what they do – their INNER BEAUTY.

Will shine through!

When we treat patients with cosmetic problems, we treat not only the problem but also the person. We treat the common imbalances of ageing such as Spleen Qi deficiency, Kidney Yin deficiency in menopause etc. give advice against.

Faulty diet and life style – and these help to maintain the effect that has been created by treating the local problems. In other words, we educate the patients to work with us.

Acupuncture is very special the treatment of cosmetic problems because it Treats the cause and the manifestation of the problem. Patients feel healthy and look beautiful at the end of treatment. The effect not only last but even improves With the patients' understanding and cooperating with the treatment protocol.

It is a 'Win-Win' treatment with no side effects.

### W2

#### **FACE (Facial acupuncture for charm and elegance)**

##### **Introduction of F.A.C.E.**

**S.H. Lee** (Korea Republic)

##### **Clinical application of F.A.C.E.**

**C.Y. Coussinoux** (France)

##### **F.A.C.E. (Mechanism, Indication) & Demonstration**

**J.H. Song** (Korea Republic)

#### WORKSHOP PROPOSE

This workshop is to introduce FACE (Facial Acupuncture for Charm and Elegance) and its clinical application.

FACE is developed and widely practiced in South Korea and it is getting introduced and used in many other countries including USA and European countries. It is based on the traditional Meridian theory and modern anatomical information on the face and head. By relaxing or tightening the muscles, this softens the fine lines on the face.

Also, it promotes the circulation of the blood with the local circulation that is the one of the great effects of acupuncture and changes the facial impression with the improvement of skin elasticity and tone.

#### WORKSHOP DESCRIPTION

The lecture is planned to include principle theory, clinical application, and two case demonstrations on the spot, if possible.

The advantages of FACE techniques are:

1. Pain Free: All the people want to be looking younger and more beautiful, but most people are afraid of the pain from surgery or injection. It is less painful because it uses exclusively processed needles unlike the prejudice that inserting pins and needles into the body is painful.
2. No side effects: It has no side effects or risks due to no insertion of artificial

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substances in the face and no use of toxins unlike the other procedures for removing the fine lines.

3. Possible to return to daily life after the treatment: Other plastic surgeries require rest for three days and more after the procedure, thus it is the burden to patients who do not have time. However, it is a natural method which does not leave the blemishes; therefore, patients can return to their daily lives immediately after the treatment.

### **W3**

#### ***Introduction to classical channel theory***

##### **E. Neal**

MD Lac, Portland, Oregon, U.S.A.

In this workshop, Dr. Neal will introduce the basic principles and theories of classical channel theory as they were first outlined within the Huangdi Neijing Suwen & Lingshu 黄帝内经素问灵枢. Written largely during China's later warring states period (475-221 BCE) and compiled during early the Western Han Dynasty (206 BCE – 9 CE), these critical theories have served as the root principles of acupuncture practice for over 2,000 years.

Classical acupuncture offers a radically different view of the human body and to the practice of Chinese medicine. In classical acupuncture, the body was viewed as a complex ecosystem, whose architecture and circulatory patterns were derived from detailed observations of the patterns of nature. Acupuncture itself, was seen as being a sophisticated technique to aid in

the restoration of the body's ecological watershed terrain. The primary goal of the classical acupuncture treatment was to reestablish the smooth flowing circulation of the body's waterways, rivers and streams. As originally defined, it had little to do with point-action theory, which is the focus of most modern clinical acupuncture. For the classical acupuncturist, classical channel theory was one of the primary foundations of clinical knowledge and its profound

principles were memorized and taken deeply to heart.

### **W4**

#### ***7 stepd in patterns discrimination and treatment of primary nocturnal enuresis***

##### **N.A. Nickolaev**

MD, PhD., Professor, Latvia

Primary nocturnal enuresis (PNE) is the most common form of enuresis.

Despite numerous studies on PNE, the cause of bed-wetting remains elusive to modern medicine, with only 1-3% of cases giving an identifiable cause. On the other hand, Chinese Medicine(CM) has established, what causes the disease, and, over the last two millennia, has developed many effective combinations of treatment.

Clinical trials proved the CM having been the best treatment for children who experience enuresis. The tried and true secret to success with PNE is that each and every treatment being offered by CM is tailored to the unique needs of the specific patient and is focused on the fundamental cause of the disease.

In comparison studies, CM has consistently proven to be most effective than modern medications, yet avoids the side effects, that are commonly experienced with the Western medical modelities.

By treating "the root" of the embarrassing disease, CM can both stop the enuresis, and also prevent future diseases that are related to the same intimate pathology mechanisms.

While many diseases are treated most effectively by using only one particular modality, such as acupuncture, tuina, herbal medicinals, or dietary therapy, in the treatment of PNE the combination of both the acupuncture and herbal medicine appeared to be the most effective one..

With the right treatment, you will save children a good deal of embarrassment, parents a good deal of money on their water bills, and, finally, allow more

children the happy memories of sleepovers with their friends.

During the workshop session the patterns discrimination, discussion over the pathogenesis of PNE, explanation of treatment principles, and most effective formula are going to be offered in details...

### W5

#### **Acupuncture without TCM - Topographic - physiological acupuncture A. Pollmann**

Dr. med., General Practitioner, Lecturer of the German Association of Physicians for Acupuncture (DÄGfA), Honorary President of the Central Association of Physicians for Naturopathic Medicine and Regulation (ZAEN), Consultant of the State Medical Chamber of Hamburg, Lectureship of the University of Hamburg, Germany

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#### WORKSHOP PROPOSE

The body is like a touch screen. On the body you find signs and icons of malfunctions and on the body you find buttons for the input. For the computer body needs boards, circuits and programs. Physiology and embryology define structures and functions.

Ill health is a disorder in self-regulation, which is not compensated. With acupuncture we treat the software of the organism. In this seminar I demonstrate a new understanding of acupuncture – without the models of TCM on the basis of modern medicine. Moreover this kind of acupuncture shows high efficacy. This acupuncture is a provocative model which must be experienced to be convinced.

#### WORKSHOP DESCRIPTION

The key to understanding acupuncture in this form is the circulation of channels. Using examples I give a compact overview of my theory - segmental innervations, fascial trains and phylogenetic superordinate functions.

TCM-syndromes are malfunctions of organs and tissues. Qi-deficiency is nothing else than a weakness in metabolism, Qi-stagnation is an overloaded

tonicity of smooth muscles and yin-yang-deficiency is a maladjustment in the autonomic nervous system. The effect of the body-loop and the acceptance of energy in the pathogenesis are explained.

Diagnosis of external diseases is made with little effort - with minimal anamnesis, diagnosis of the channels and diagnosis according to the direction of motion. The rule of distance is presented. I demonstrate the effect within seconds.

For internal diseases I show how to get a functional diagnosis in short time - with quick anamnesis, segmental diagnosis and minimal tongue diagnosis. I exemplify from a disease, such as a treatment is done.

I enjoy treating patients or participants in the seminar to show the effect.

By the way follows the demonstration of the anatomical leading structures and how I locate the channels and points. And of course we can discuss as long as time permits.

### W6

#### **Triggerpoint acupuncture (Dry needling) D. Irnich**

PD Dr. med., Head of the Multidisciplinary Pain Centre, Department of Anesthesiology, University of Munich, Germany

Pain and limited function of the locomotor system are one of the most common reasons for consulting a doctor or therapist. The muscle has a key position in this, because of its anatomical and functional properties. The importance of the muscles is frequently underestimated in practice, however, although muscular dysbalance, muscle tension and painful disorders of muscle function play a large part in both acute and chronic locomotor system symptoms, according to current knowledge. The clinical correlate is the myofascial trigger point (mTrP).

Dry needling is a functional anatomical locoregional needling technique for

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the treatment of myofascial symptoms. The aim of needling is to find the exact site of the mTrP and cause a local muscle twitch reaction.

There are various forms of this technique:

- Direct dry needling of the mTrP
- Dry needling of the affected muscle fascia
- Superficial dry needling

Techniques similar to dry needling have already been described in traditional Chinese acupuncture texts. It is only with recent research that the associations with function and anatomy have become known.

The effect of triggerpoint acupuncture can be optimised by additional needling in accordance with the criteria of traditional Chinese acupuncture and needling of microsystem points (e.g. points on the ear). In this case, the far points, chosen according to meridian theory, should be treated first. This can relieve local pain during the following trigger point needling. This effect can also be achieved by prior needling of microsystem points. Under favourable conditions far point needling alone can lead to the disappearance of the mTrP and make local treatment superfluous. For anxious patients or those with very strong local sensitivity, relief can be achieved initially through contralateral needling.

This workshop will include the presentation of systematic, but simple trigger point diagnostic, practical demonstration of different technics, and the demonstration of integrative treatment of chronic myofascial pain syndrome by case reports.

## **W7**

***Obstacles in therapy: Interference fields and the contribution of neural therapy to clinical success***

***Neural therapy for acupuncture non-responders. The importance of the interference field tooth***

**R. Wander** (Germany)

***Stress-Parainflammation-Extracellular Matrix-Depression: can the interference field be the common link?***

**G. Papathanasiou** (Greece)

***Neural therapy on acu-points: Why, when and how to do it***

**H. Steurer** (Austria)

***Quick and efficient steps in neural therapy***

**W. Ortner** (Austria)

## WORKSHOP PROPOSE

Many clinicians experience patients that respond partly or not at all to acupuncture treatment. These situations may denote a deficiency or even a blockade of the autoregulatory homeostatic mechanisms. Most often these phenomena are being maintained through the presence of one or more interference fields. According to Neural Therapy an interference field is a chronically local tissue low level inflammation of an area with autonomic innervation with the potential to affect the nervous, endocrine and immune system either locally and/or generally. How to find and treat an interference field as well as the segmental treatment in terms of Neural Therapy is the objective of the workshop.

## WORKSHOP DESCRIPTION

The workshop has a duration of three hours. It consists of a theoretical part and a practical part. The theoretical part is as follows: Three presentations of twenty minutes duration plus ten minutes discussion for each presentation. We start with the presentation of Dr. Wander, then follows the presentation of Dr. Papathanasiou and at the end of this part follows the presentation of Dr. Steurer.

The practical part consists of the introductory presentation of Dr. Ortner which will last about thirty minutes and then follows the practical part with live demonstration of taking the History, performing the clinical examination and if possible doing some simple injections on the patient. The practical part will be supervised by Dr.Ortner, Dr.Wander and Dr. Papathanasiou.

### W8

#### ***Post-traumatic stress disorders in medical practice – An integrative east-west psychosomatic approach***

**W. Marić-Oehler**

Bad Homburg (D), General Secretary of the International Council of Medical Acupuncture and Related Techniques ICMART, University of Mainz – Lecturer of Acupuncture, Honorary Professor of Fujian University of TCM, Honorary President of the German Medical Acupuncture Association DAEGfA

As long as Post-traumatic Stress Disorder/PTSD is defined as a separate pattern in psychotherapeutic medicine it is diagnosed increasingly often in medical and psychotherapeutic practice. Research in neuroscience is more and more focused on this subject.

The oriental medical understanding of (psychic) shock, injury and traumatic experience is psycho-somatic in the unique way of this medical system.

PTSD will be explained by concepts of Oriental Medicine, e.g. Five Phases, Zang Fu, the concept of Qi, the concept of Hun Po and the Meridian Theory. The knowledge and experience of Oriental Medicine will be connected with western understanding, ideas and concepts in medicine, psychosomatics and psychotherapy.

It could be helpful to combine western psychotherapeutic diagnostic procedures with the diagnostics of Oriental Medicine. This makes it possible to combine treatment procedures of both systems not just parallel but in a specific way, different forms of psychotherapy with different forms of acupuncture and other methods of OM. In this way patients with PTSD could get an integrative east-west psycho-somatic treatment.

In this workshop case reports will be demonstrated, practical advice will be given and exemplary treatment settings will be elaborated.

### W9

#### ***How microsystems acupuncture points correlate with AUCH (Awareness Under Conscious Hypnosis) method***

**A.O. Ozturk, H.A. Nogay** (Turkey)

#### WORKSHOP PURPOSE

To illustrate how Traditional Chinese Medicine (TCM) hand and scalp points, Su-jok and Soliman hand acupoints, and Yamamoto scalp and chest acupuncture points correlate with “Awareness Under Conscious Hypnosis (AUCH) method”; and to discuss interactively the use of these acupoints as part of a treatment with AUCH Method.

#### WORKSHOP DESCRIPTION

In this workshop, it will be shown and explained how to stimulate TCM hand and scalp acupoints, Su-jok and Soliman hand acupoints, and Yamamoto scalp and chest acupuncture points with AUCH method by using videos regarding previous applications of the method; and interactive discussions will be made.

Main method is the “Awareness Under Conscious Hypnosis (AUCH) Method”<sup>1</sup>; besides “Yamamoto, Su jok, and Soliman’s microsystems acupuncture” as well as “TCM acupoints” can be applied to support the treatment.

The AUCH Method can be utilized in many different fields of medicine such as surgical medicine, dentistry, gynecology and obstetrics, psychosomatic, psychological and psychiatric diseases<sup>2,3,4,5,6,7,8,9</sup>.

AUCH can be applied by different induction methods; and creates “the state of consciousness” by resulting in neurobiological and neurophysiologic changes in attention, perception, memory, senses and affections. To create the aforementioned aimed changes in mind, body and soul; AUCH has a treatment protocol consisting of three steps respectively “MAYA, Induction and Autohypnosis”

i) MAYA (Making, Acceptance with Your Awareness): The patient’s acceptance and willingness is asked to apply the method if the hypnotist thinks that

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AUCH method would be beneficial to solve the patient's problems.

ii) INDUCTION: Suggestions were given to the patient by using a proper induction method to support mental, physical and social well-being. In this step, "the eye-to-eye fixation and giving suggestions" technique is the main technique but also a combination of other treatment techniques can be applied together, such as Su-jok, Soliman, TCM and Yamamoto microsystems acupunctures.

iii) AUTO-HYPNOSIS: In this step, the patient is given the ability to use hypnosis with a key/trigger sign given by the hypnotist who has overtaken the treatment procedure/process to get benefited from it whenever and wherever it is needed even if the hypnotist is not with the patient to achieve the required continuity of the treatment. Most of the time a hand gesture which is covering the thumb with other four fingers like a fist is used as the key/trigger sign. Furthermore, Su-jok, Soliman and TCM microsystems acupunctures can be utilized to increase the effectiveness of the treatment in this step.

During the induction and auto-hypnosis stages of AUCH method, Su jok, Soliman, Yamamoto and TCM microsystems acupuncture points can be inducted to enhance and increase the benefits of the treatment. The points are activated by touching and/or taping. These points can be effectively used in different parts of body, such as scalp, forehead, chest, shoulders and hand during induction and auto hypnosis stages besides giving hypnotic suggestions.

Yamamoto microsystems acupuncture points are stimulated in scalp and chest, to have a direct influence on the entire body's qi, blood and moisture from the organ to cellular level to have the aimed changes of physiology and symptomatology; and especially for the treatment of pain, neurological conditions, and organ dysfunctions.<sup>10</sup> It can be applied during induction stage.

TCM, Su jok and Soliman's hand acupuncture can be utilized for hands during induction stage; and since hands have numerous nerve endings and a wider

impact on cerebral cortex (homunculus), a rapid treatment can be achieved.<sup>11</sup> In addition, since hand receives a generous nerve supply from three main nerves "the median nerve, the ulnar nerve and the radial nerve", it can be effectively utilized for both somatic and autonomic intervention.<sup>12</sup> Besides, in Traditional Chinese Medicine, the hands have a critical importance to the vital energetic equilibrium of the whole body since the qi of the<sup>12</sup> regular channels arises in hand and foot.<sup>13</sup>

Furthermore, TCM, Su jok and Soliman's hand acupoints are especially an ideal treatment for auto hypnosis stage since they can be accessed at any time and place, by the patient as a key/trigger hand gesture and as suggested by the hypnotist.<sup>11</sup>

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### W10

#### ***New modern trends and devices for informational stimulation and research of acupuncture meridians and points***

**J. Mezei** (Romania), **D. Mezei** (Romania), **K. Dillinger** (Austria),  
**F. Hinterhofer** (Austria)

28

#### WORKSHOP PROPOSE

Aim of the workshop is to do an analytical presentation of the new modern methods derived from TCM, which are based upon the therapeutical use of one or more of the fundamental phenomena of informational exchange.

These are new trends and therapeutic modalities in agreement with the requirements of contemporary medicine:

- non traumatic/noninvasive or mini-invasive, pain free methods
  - without risk of infectious disease transmission (HIV, Hep.C)
  - quick effectiveness
  - efficacy similar or better than the traditional methods
- scientific substantiation

#### WORKSHOP DESCRIPTION

The basic concept of acupuncture is informational exchange between the living organism and its environment.

This informational communication takes place via structural factors (connective tissue, fundamental matrix, proprioceptive system) and functional

factors (psycho-neuro-endocrin & metabolic).

Fundamental physicochemical phenomena underlying to the informational exchange are of following nature:

- mechanical and chemical
- piezoelectric and electric field
- antenna phenomenon– reactive opening/closing (I.F. Dumitrescu, D. Constantin)
- acoustic phenomenon
- magnetic field
- electromagnetic field
- bio resonance

The material and method consists of the presentation of up to date new modalities of informational stimulation of meridians & acupoints, based upon biochemical informational stimulation, physiological piezoelectric stimulation, acoustical, modulated coherent electromagnetic field stimulation, holopathy, bioresonance and the presentation of their characteristics, new way of action, their clinical use, efficiency and their designation for double-blind research studies.

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## W11

### ***The TCM-CAO method, a combined treatment of weight excess and obesity with Chinese diet, auriculotherapy and homeopathy***

#### **A. Liguori**

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#### **E. Moustakakis**

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#### **L. Silli**

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#### **R. Rinaldi**

Adjunct Professor, Department of Anatomic, Histological, Forensic-medicine and Locomotor-system Sciences, "Sapienza" State University, School of Medicine, Rome, Italy

#### PURPOSE

The workshop on the TCM-CAO method, a combined treatment of weight excess and obesity set up by the Paracelso Institute of Rome, will be focused on:

- the peculiar approach of Chinese medicine to the obese subject, which is viewed as a weakened person that suffers from an insufficient assimilation of nutrients.
- description of a combined protocol based on Chinese dietetics, auriculotherapy and homeopathy, able to provide all the nutrients that the organism needs while making a slimming diet, so enabling people under diet not to feel hunger and to be in health.
- findings of scientific researches developed in university circles that demonstrate the advantages of this treatment on the preservation of the lean mass and on rebalancing of psychometric parameters.

1

### ***Cycling the Dragon – Does the fire still breathe? Acupuncture in the treatment of acute herpes zoster***

**D. Irnich**

Multidisciplinary Pain Centre, Department of Anaesthesiology, University of Munich, Munich, Germany

Herpes zoster (HZ) is a neurocutaneous disease which is caused by a reactivation of latent varicella-zoster virus in the dorsal root ganglia and the dorsal horn of the spinal cord. Factors that might trigger such reactivation can be of exogenous (e.g. ultraviolet radiation, trauma) and endogenous (e.g. immunocompromise, fever, AIDS) nature. Epidemiologic studies revealed a prevalence of 0.4% with a 20-fold increase between childhood and old age. Elderly patients also display a higher risk (50%) for developing post herpetic neuralgia (PHN) when compared to the overall frequency of PHN (9-14%). Besides being more than 60 years of age, further risk factors for PHN are the severity of pain in acute HZ, prodromal pain and extensive skin affection. Up to 75% of all patients, in which all four factors appear, suffer from PHN.

Within the concept of Traditional Chinese Medicine (TCM) HZ different patterns of symptoms can be attributed to endogenous damp heat, invasion of wind and heat, blood heat, hyperactivity of fire in the liver and gallbladder or affection of exogenous toxins.

Acupuncture has the power to fight this dragon fire. When taking the dermatological appearance of HZ into account, one may distinguish between Xuen represented by dermatitis accompanied by itching and Chuan represented by ulcerations or red skin rash, respectively. Within the concept of TCM Xuen is related to wind and/or damp pathogens, while Chuan is more associated with excessive blood heat. Thus, treatment concepts are to be designed accordingly. In order to disperse wind and act against damp pathogens in the case of Xuen one may use the following points: GB20 SP10 and LI11. In the case of Chuan points such as LV2, SP9, BL18 and GB34 may

help to reduce blood heat. Further techniques include circling the dragon (needling around the affected area), using plum-blossom needling, cupping and bleeding, involving microsystems, stimulate electrically in order to reduce the heat. Last but not least, it is important to point out the treatment of reflective myofascial trigger points by dry needling.

Scientific evidence for acupuncture as a treatment of acute HZ and PHN is still sparse. In a trial performed by Lewith et al. only a low number of 62 patients suffering from PHN showed an improvement after both acupuncture and control treatment. On the other hand, a study recently published by Hui et al. demonstrates that a three-week CAM approach integrating therapies from TCM (acupuncture among others) and neural therapy is effective in reducing pain associated to HZ with a mean duration of 4.8 months. Also very promising results were published by Ursini et al., who showed that acupuncture was as effective as intense analgesic medication in reducing pain and preventing PHN in severe cases of acute HZ. The results of a large scale study on the effectiveness of acupuncture in the treatment of acute HZ conducted in our department are still pending. However, a pre-analysis of our data indicates that acupuncture is as effective as gabapentin, and has remarkable effects on the Pain Disability Index.

In chronic PHN a multimodal treatment approach seems to be the only effective therapy.

The fire might be to extinguish, beware of the glut.

2

### ***The impact of acupuncture in IVF***

**M. Karavis, N. Charetakis, M. Segredou, G. Fazakis, K. Theodoratou**

Athens, Greece

In the past few years we are dealing with an augmenting need to resolve infertility issues. The reasons are social, cultural and environmental. However, the developments regarding Molecular Biology, neurophysiology and

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endocrinology, as well as, the advances made on techniques that allow us to intervene on a cellular level, have provided solutions creating a new medical-biological application regarding In Vitro Fertilization (IVF). Even though these programs are constantly ameliorating and new research is under way, there is anxiety/are worries regarding the side-effects of the drugs used and the levels of success of a fertility circle.

The questions are thus: In such an environment is there room for acupuncture? Can acupuncture ameliorate the results of the success of such programs?

In this lecture we will deal with four topics and we will try to answer the following questions:

1. N. Chairetakis: The surveys of the principal published works on acupuncture and infertility. The results of practice in IVF programs.
2. M. Segredou: The physiology of the neuro-hormonal axis Hypothalamus-pituitary-ovaries and the factors that influence its functions. Their role in Infertility.
3. G. Fazakis: Acupuncture protocols, electro-acupuncture and auricular acupuncture and Infertility. An approach on the different stages of IVF.
4. K. Theodoratou: The approach of Traditional Chinese Medicine syndromes and treatments in relation with western diagnosis.

### 3

#### ***Classical acupuncture and its relevance to the modern physician***

##### **E. Neal**

MD Lac, Portland, Oregon, U.S.A.

During this lecture presentation, Dr. Neal will introduce some of the basic principles of Neijing Classical Acupuncture and will review the history and evolution of this critical text. Traditionally, most significant theories found within the practice of clinical acupuncture have in some way been derived

from these original principles. Yet for the most part, this body of knowledge has been forgotten in modern times. In addition to giving an overview to the original Neijing text, other topics that will be discussed will be: the primary differences between classical and modern sciences and the inherent problems in their interpretation, as well as the specific relevance that classical medicine offers the physician-level practitioner of Chinese medicine.

### 4

#### ***Topographic-physiological acupuncture by polyneuropathy***

##### **A. Pollmann**

Dr. med., General Practitioner, Lecturer of the German Association of Physicians for Acupuncture (DÄGfA), Honorary President of the Central Association of Physicians for Naturopathic Medicine and Regulation (ZAEN), Consultant of the State Medical Chamber of Hamburg, lectureship of the University of Hamburg, Germany

The presentation defined a new understanding of acupuncture – the Topographic-Physiological Acupuncture. This acupuncture is applied physiology. It's system is based on the superordinate functions of the germ layers and get by without TCM. A small multicenter observational study shows the relevans of this form of acupuncture in the treatment of Polyneuropathy. The acupuncture in the sence of TCM ist transferred into the current physiology. I define acupuncture as an overlap of the superordinate functions of the germ layers with fascial trails and segmental innervation. The acupuncture points are lined up on channels/ meridians. Four channels in series connected forme a circulation. The circulation is the sticking point for understanding acupuncture.

While the analytical mind penetrates into the smallest parts, the holistic view searches for higher-level structures and functions. In acupuncture, as well as the physiology whe have the same superordinated functions – metabolism, motion and information processing. This three functions are embodied in the three germ layers as well as through the three circulations.

The Frontal Circulation is composed of the channels of the lung, colon, stomach and spleen. This circulation is associated with the superordinated functions of digestion and metabolism. These are the functions of the organs and tissues that have been derived from the germ layer endoderm - the oro-gastro-intestinal tract with mucosa, liver, pancreas and immune system. (What we call in the TCM 'spleen' is not identical to the organ spleen.) All the acupuncture points in this circulation have an effect on digestion and metabolism.

The Intermediary (lateral) Circulation, which consists of the channels of pericardium, triple heater, gall bladder and liver, has a reference to the superordinated functions of movement and transportation. These are the functions of the organs and tissues of the germ layer mesoderm - the smooth muscles, skeletal muscles and heart muscle, blood vessels, the cells of haematopoiesis and the pericardium, pleura and peritoneum. (The liver in the TCM is not the metabolic liver.) Typical symptoms of this circulation are the faulty tonicity of muscles and the stagnant motion in the vessels.

The Posterior Circulation with the channels of the heart, small intestine, bladder and kidney has been linked with the functions of information processing, dissemination and saving. These are functions of the organs and tissues of ectodermal origin. It is the nervous system and its superordinated controlling hormones and it is the genetic information transfer and transcription. In TCM the current information processing and control system is called Shen / spirit. The genetic system for outlive information is called Jing / essence. Shen and Jing belong to the channels of heart and kidney.

Of course, the germ layers do not remain separated but combine together in organ formations. Based on this system, the physician has to identify the affected tissue. Because often he knows the circulation and he can compile the treatment plan.

In a small multicenter observational study, I examined the effect of this form of acupuncture in the treatment of the Polyneuropathy in the legs. The impaired function belongs to the information processing and therefore

to the Dorsal Circulation. To acupuncture the points of the heart- and small-intestine-channels combined with Ki3 and Bl67 shows impressive efficiency: 11 of 14 patients had improved considerably.

### 5

#### **Gold-bead acupuncture in arthrosis**

##### **E. Schulze**

Kamen, Germany

**Purpose:** The Gold-Bead Acupuncture is a special kind of implant acupuncture in animals (dogs, cats, horses, even birds), a permanent acupuncture with 24 karat goldbeads to treat chronic pain due to degenerative joint diseases. The specific point selection must keep in mind that there are differences between this method and the dry needle acupuncture. The treatments of hip-arthrosis, elbow-arthrosis and toe-arthrosis are shown to explain the principles.

**Relevance:** The gold-bead acupuncture is a minimal invasive treatment of chronic pain in joints. If done by an experienced acupuncturist, it is very safe, very successful and much cheaper than conventional surgery.

**Participants, Methods:** This presentation is based on the results of more than 11,000 treatments of dogs, cats, horses and birds. The owners and the vets who sent the patients were asked to give a feedback. The results are classified in the following groups: 1) very good (no signs of pain, ability to move), 2) good (normally no signs of pain, but still some lameness), 3) little better (still signs of moderate pain), 4) no response to treatment, 5) worse after treatment.

**Results:** The weight of the dogs ranged from 2 kg (Chihuahua) to 95 kg (Irish Wolfhound), the age ranged from 4 months to 17 years. The final results are depending on the treated joints and differ from 85% to 95% success (very good or good).

**Conclusions:** Properly done, the gold-bead acupuncture can be a very successful treatment not only in animals but in human beings, too.

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## 6

### ***Gold bead implants in invalidant osteoarthritis: 10 years of clinical experience in Canines***

**F. Minguell Martín**

DVM, Clínica Veterinaria Ca n´ Oriac y Centre Veterinari Aura, Sabadell, Barcelona, Spain

Several scientific studies have shown effects of gold in oral and local administration. Though Gold Bead Implants have been used for prevention and paliative treatment of different pathological patterns, scientific evidences verify its use to treat osteoarthritis in very painful joints.

Objective of this lecture is to describe Gold Bead Implants treatments in osteoarthritic joints for more than ten years in veterinary clinical practice, its results, and to extrapolate its therapeutical benefits to human beings.

Scientific explanations to justify its clinical use are described and let suggest this few aggressive and satisfactory results therapeutical alternative to be considered in therapeutical protocol of painful joint patterns.

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## 7

### ***Veterinary acupuncture and veterinary homeopathy***

**K. Loukaki**

DVM, PhD, Veterinary Clinic, Athens, Greece

Veterinary acupuncture has a long history and is closely associated with human acupuncture. The earliest Chinese medical practitioners treated people and animals untild Zhou dynasty (1122-750BCE), when the veterinary medicine was designated as a separated branch of Traditional Chinese Medicine. Acupuncture is an holistic energy – based system of diagnosis and treatment that activates the self –healing power s of the animal’s organism.

The term acupuncture derives the meaning form the Latin words acus, meaning needle and pungere meaning to pierce. Acupuncture is a method by which special metal needles are inserted into specific locations in the body of animals to prevent and treat disease. The Chinese Medicine believes that qi is the true source of the entire universe and of life in general. The Meridians form the basis of acupuncture as they are the pathways by which Qi circulate the body. The concepts of Yin and Yang portray and attempt to simplify an understanding of the dynamic nature of life in all its interrelationships. The TCM generally states that disease will eventually manifest when the body of animal in in a state of imbalance, the causes of which can be multiply. Illness therefore is due to the combination of several causes leading to imbalance. TCM largely consists in weaving together in a logical way all the signs and symptoms to develop a coherent picture of the patterned of disharmony. The illness arises when the rhythmic cycling between Yin and Yang becomes imbalanced. Diagnosis in TCM based in the Chinese Healing principles and theory, as Five Elements theory and Yin and Yang theory. The Acupuncture animal history case must be included the traditional physical exam and a very analytical data about the manner of feeding and a data with information about mental symptoms.

Hippocrates expressed for the first time some of the ideas, on which homeopathy was based hundreds of years later by Samuel Hahnemann. The word homeopathy is a Greek word (ομοιοπαθητική) and consists of two words: “ὅμοιον” which means similar and “πάθος” which means passion-suffering. Veterinary Homeopathy is a diagnostic and therapeutic system, which allows us to utilize the specific symptoms, through which every sick organism expresses its disease according to its idiosyncrasy and to administer the similar homeopathic medicine. One of the principles of the homeopathic way of approaching the sick organism is, that health is not a static situation but a dynamic procedure, which tends to maintain the best possible balance in an organism. This perception predisposes the existence of self-regulation mechanisms, which protect the organism from losing its balance. Disease is an intense effort of external and internal factors (physical, chemical, biological

etc) to impose a disturbance of this balance and is manifested through symptoms at the physical, mental and psychological level of the organism.

For thousands of years Man used substances from his environment, from the vegetable, the animal and the mineral kingdom to cure the diseases. The processing of these substances was made by natural methods like mixing, sublimation, compression, pulverization, dilution, boiling, heating, freezing, cooling. In homeopathy they follow a different way, which is a combination of the above mentioned ways, to produce medicines: they take natural substances, which we process with a different, not chemical, method, which is called potentization. In homeopathy there are certain principles as in the TMC, which has been named homeopathic diagnostic laws. The homeopathic diagnostic procedure follows these certain principles, which are taken into consideration during the compiling of the homeopathic case history. When someone defines the term homeopathy, at the same time he formulates the basic principle of homeopathy, the law of similars: A disease can be cured by a medicine, which can cause on a healthy organism similar symptoms with the symptoms of the disease. The homeopathic case history includes: a) the general data, which are general information about the animal and its mental and psychological symptoms and b) the special data, which include the physical symptoms and their modalities, which are the factors that modify and influence the symptoms (time, food, temperature, the position of the body etc).

Veterinary Acupuncture and Veterinary Homeopathy apparently developed the theory of homeostasis in the animals. The two method seems to have common and uncommon signs which give them the opportunity to have an holistically approach of the animal's organism

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### 8

#### ***Acupuncture application in Iguana***

**P. Papaioannou**

Athens, Greece

On 4/11/12 came to our hospital an owner with his iguana. The animal was 4,5 years old but he had a much younger appearance (smaller) also he had a serious problem in the spinal cord and inability to move hind legs (paralyzed and without reflexes). His tail was also almost paralyzed.

We decided to start an acupuncture treatment with the back-shu points.

Also we changed his diet and we improved the enviroment in his terrarium (bigger and with the appropriate light). The application of acupuncture treatment was 2 times a week for 2 weeks and then 1 time a week until the end of March. Each time was up to 12 min. The results were impressive.

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### 9

#### ***Veterinary acupuncture in Indonesia***

**R.T.S. Adikara, K. Saputra**

Veterinary Faculty Airlangga University, Acupuncture Research Laboratory in Health Services, Surabaya, Indonesia

Veterinary acupuncture in Indonesia start in 1990 at Veterinary Faculty Airlangga University Surabaya. The first interest was productivity and reproductivity for cattle's, worked with small animals like chicken and large animal like cow and goat. Many research in veterinary area within 20 years (1990 - 2010) and the technique of acupuncture modality by needle, electricity and laser modality.

The research of the physiological acupuncture based on the phenomenon of Morphofunctional organ after stimulus of specific acupoint with certain modulation will increase the endocrine metabolic pathways, and cause to

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increase body weight, milk production, and super ovulation in cattle's and sheep's. Combination acupuncture and others conventional technology succeed as newest veterinary science based on energetic medicine and responding to veterinarian demands for training in complementary veterinary medicine.

Results of the study, providing daily weight gain of 1.2kg, the increase reached 80% egg production, milk production increased by 30% and super ovulation in sheep, resulting in four twins.

## 10

### ***Response to acupuncture stimulation as registered by MRI and EEG: Possibilities of documentation***

**A. Sant'ana, N. Padula**

Hospital Estadual Bauru, Bauru, Brazil

**Purpose:** To highlight the potential effects of acupuncture that can be underlined and registered by means of technological support.

**Relevance:** To demonstrate that some effects of the treatment with acupuncture can be registered by MRI and EEG, independently from the clinical outcomes.

**Participants:** A one year old girl who has been admitted to our service with episodics convulsions and spasticity, without previous manifestations. Initial MRI showed important swelling in the ganglia basalis region, and the EEG has shown some cortical disorganization. Nevertheless, no etiologic diagnosis could be drawn from this. Response to farmacological treatment for seizures and contractility was poor.

**Methods:** Empirical auricular and systemic treatment were then started, guided by the information from the initial MRI, and control by EEG. Auricular points were most related with the brain stem and subcortical structures. Systemic points included those indicated either to epilepsy or to relaxation (GB34, GB43, L3, PC6), associated with general points (S36, LI4).

**Analysis:** A subsequent evaluation with MRI has been taken after one month treatment, with comparison of the cortical and subcortical regions. The EEG was interpreted visually, as well as with fractals.

**Results:** Initially, no clear clinical evolution could be observed, but the second MRI has shown that the morfological elements had changed after one month, with evolving of the swelling that could not be attributed to no other causal elements or any of the drugs being then administered. EEG showed better organization of the waves during the period under effect of the needles, which wasn't permanent in the following hour or days.

**Conclusions:** Empirical initial treatment could be derived from the informations from MRI and EEG, and control of the evolution has been possible, even with the eventual and partial dissociation with the clinics. This may encourage us to apply our medical acupuncture repertoire to some undefined clinics, as well as to some temporally undetermined diagnosis.

## 11

### ***An integrated survey of Chinese pulses: An easy diagnostic overview of the patient's complaints at your fingertips***

**J.P.J. Fossion**

MD, BVGA-ABMA, Chair Scientific Committee, Brussels, Belgium

**Background:** Anamnestic sorting out of the patient's presentation of complaints and symptoms may contain an endless story of present state and past medical history, with its intrinsic complications and contradictions.

**Aim:** This talk aims to give an introduction to a quick diagnostic overview of the present state of the patient independent from his/hers language skills. Can we integrate the Chinese pulses into a clinical Chinese synopsis?

**Results:** In contrast to the unremitting belief amongst Chinese practitioners that Chinese pulses are indissoluble, subjective and masked by Western pharmaca

taken by the patient, we are determined to prove the contrary and to encourage this quick and synthetic clinical approach in reach of our own fingertips.

**Conclusion:** We present a global summary. The intrinsic contradictions about the organ correspondances within the historical traditions of Chinese classical authorities [1] is very easy to overcome, considering they all consent with the somatic divisions of the Triple Burner. The pathology of the localization of functions and somatic localization of the Large Intestine, the Small Intestine, the Pericard- and Triple Burner concepts in particular and the Yin-Yang coupling of Zang organs and their correspondent Fu intestines in general can be easily resolved referring to the somatic compartment of a complaint of the patient as unmistakable guideline to the corresponding palpating bilateral fingerposition. We present an integrated overview of Chinese pulses according to the bilateral finger localization and depth of palpation. We give a survey of the pulses within the frame of our clinical Chinese synopsis for diagnostic reference. We give a limited overview of the most common groups of Western pharmacological influences of the pulse.

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**12**

***The holistic effect of QI on pulse shape and heart rate variability in elderly: A clinical trial research protocol***

**R. Fossion<sup>1</sup>, D. Mino León<sup>1</sup>, R. González González<sup>2</sup>**

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**Relevance:** Populations are ageing in many countries all over the world, hence leading to what has been called an epidemiological transition of predominance of acute and infectious diseases to chronic and non-

infectious afflictions [1]. Importantly, the latter type of diseases does not always originate in structural organ damage, but sometimes can be traced to deteriorated biological rhythms, and for this reason have been called dynamical diseases [2]. It is in part the Autonomic Nervous System (ANS) which is responsible for the synchronization of the different biological rhythms, and a malfunctioning in this system is called dysautonomia [3]. The working of the ANS can be accessed by the measure of Heart Rate Variability (HRV), which has proven to be an excellent morbidity and mortality predictor even before the advent of symptoms [4]. Where modern Western medicine is more reductionist oriented and extremely successful in treating structural diseases, Traditional Chinese Medicine (TCM) is more holistic and most diseases are interpreted in a dynamical way [5]. Because of its qualitative nature, TCM is not well accepted within modern Western medicine. However, thanks to new technological and statistical advances, old qualitative observables of TCM become quantifiable.

**Purpose:** We are planning a non-randomized clinical trial in elderly people in which we will compare the HRV and the quantified shape of the radial pulse wave form before and after a series of sessions with an individualized treatment with TCM, focussed on improving the QI of the participants (including acupuncture, moxibustion, etc.)

**Participants:** In this descriptive pilot study, we will include 10 elderly people of over 70 years old from the "Optimists Club" of Mexico City.

**Methods:** HRV measurement using holter monitoring. Quantification of the radial pulse through digitalized oxymetry.

**Expected results:** We expect to find an improvement of the HRV and pulse shape of the elderly participants after the TCM treatment. We will be able to quantify the improvement.

**Conclusions:** If improving the QI indeed has a holistic healing effect on the whole body, improvements must be recognisable in the ANS and thus be quantifiable with HRV measurements.

**Grant:** This protocol is part of the basic research project CB-2011-01/167441

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that has been awarded a 80.000 euro grant from the Mexican governmental science organization CONACyT.

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### 13

#### ***Topographic-physiological acupuncture in the musculoskeletal system***

##### **A. Pollmann**

Dr. med., General Practitioner, Lecturer of the German Association of Physicians for Acupuncture (DÄGfA), Honorary President of the Central Association of Physicians for Naturopathic Medicine and Regulation (ZAEN), Consultant of the State Medical Chamber of Hamburg, Lectureship of the University of Hamburg, Germany

Topographic-Physiological Acupuncture is applied physiology. In the meaning of modern medicine, I define acupuncture as an overlap of superordinate phylogenetic functions with lines along fascial trains and segmental innervations. Fascial trains describe nearly the same route like the acupuncture-channels. Four channels are connected in a circulation. Three circulations typify the three motions in the principle directions: lateral inclination, rotation and flexion. The correlation oft acupuncture points to regions of the body is clearly mapped. Acupuncture points are points of reaction. In this simple model, you can treat acupuncture with high efficacy.

In acupuncture, we know channels and tendon-muscular-channels. The channels run in the surface and the tendon-muscular-channels extend in the depth. They exist in parallel. Like the acupuncture-channels the fascial trains reach from the fingers or toes to the head or the chest. In my understanding, the tendon-muscular-channels are the fascial tubes. The fascia wraps muscles,

tendons and articulations and subsumes a motion unit.

In acupuncture four channels add to a circulation. The circulation is the base for understanding acupuncture. The three circulations are three functional units. Each circulation is joint with one of the three superordinate motions: lateral inclination, rotation and flexion.

The Frontal Circulation is composed of the channels of the lung, colon, stomach and spleen. The superordinate motor direction is the lateral flexion. Provided that the construction of the articulations allows this movement. The Intermediary (lateral) Circulation, which consists of the channels of pericardium, triple heater, gall bladder and liver, has a relation to the rotation. Occasionally, the lateral inclination is associated with this circulation too. (The vertebral bodies rotate while the lateral inclination.) The Dorsal Circulation with the channels of the heart, small intestine, bladder and kidney has been linked with the function flexion, both, the anteflexion as the retroflexion. Defining the disturbed direction, you know the aggrieved circulation.

The triggerpoint is a point inside the tendon-muscular-channel. The acupuncture point you find in the cutis. It is a point of reaction. The acupuncture points are lined up in sequins ordered like a map. In the projection of points, there are two correlations: 1.) The acupuncture point relates to a part of the other extremity 2.) The acupuncture point relates to a region of the trunk. According to the circulation and corresponding to the mapping order, the points are selected for the treatment plan.

The localization of the points is performed strictly following to anatomic structures. The points are located between the muscle edges and between tendons, almost never on muscle bellies. According to this model, the efficacy of acupuncture is very high. In the treatment of disorders of the musculoskeletal system, you see an effect within seconds in about 80%.

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***Use of traditional medicine to aid victims of 2011's great east Japan earthquake diagnosis from the traditional point of view to aid victims of future disasters - A case series***

**S. Takashi**

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**Purpose and Relevance:** A characteristic of the survivors of the Great East Japan Earthquake is that they did not suffer much physical trauma, except hypothermia, immediately after the tsunami. In the care of victims of large-scale natural disasters, prevention of and treatment for depression, suicide, and Post-Traumatic Stress Disorder is always required. The author used traditional medicine (mainly traditional Chinese medicine) during his work as a volunteer after the earthquake at a stricken area. The purpose of this study is to investigate the psychosomatic state of the victims from a traditional viewpoint and examine coping methods through traditional medicine for natural disasters in the near future.

**Participants and Methods:** The author conducted medical examinations for staff who survived the disaster, using traditional medicines, at the nursing facility in Yuriage area of Natori city in Miyagi prefecture.

**Analysis and Result:** Thirty-two tsunami victims (7 men and 25 women; average age: 40 years old) were examined by a physician practicing traditional medicine (TCM and Kampo) for over 15 years. The date of examination was 51 ± 16 days from 11 March 2011 (between 15 April and 18 June). Thirty-one victims met with the death of a nursing facility user or the staff or confronted with their own vital crisis. The families of two subjects were dead and the families of two other subjects were missing. The homes of four subjects were destroyed completely and the homes of two people were damaged. The cars of 14 subjects were washed away and they were left without any personal means of commuting.

Insomnia (12), fatigue (11), palpitations (10), shoulder discomfort (9), headache (7), and hyperorexia (6) were physical symptoms found in the victims.

Anxiety complex (11), a sense of guilt (7), a sense of fear (5), a fear of dreams (6), anger, and irritation (5) were neurologic manifestations found in the victims.

Earthquake and tsunami (4), worry about the future (1), worry about work (1), and unidentified fears (5) were found to be the causes of anxiety.

Fear, sorrow, anger, a feeling of ineffectualness and being lost, anxiety complex, and a sense of guilt were present in the hearts of the victims.

Twenty-three victims (72%) showed Qi-stagnation which needs acupuncture on Taichong (LI3) or Ganshu (BL18), which circulates the Qi.

**Conclusions:** The association between emotions and the “bowels” is an established one in traditional medicine and there is a regimen for each emotional problem. The subjective symptoms of the patients are considered important for diagnosis when using traditional medicine. Therefore, a traditional medical interview tends to be conducted by examining not only the physical symptoms but also emotional aspects in detail. As a result, the patient may require counselling to recover. Traditional medical practices, like using herbs or acupuncture, which can cure physical as well as emotional problems at the same time, could be one option for the care of victims of disasters.

**Biography:**

Graduated from Tohoku University Graduate School of Medicine.

Physician practice herbal medicine and acupuncture (TCM and Kampo medicine style) in Tohoku University Hospital.

Study's target is to clarify the mechanism of acupuncture, moxibustion and herbal medicine.

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**Biomechanical approach related to meridians and myofascias;  
Biomechanical acupuncture**

**S. Cho, J. Lee, S. Oh, S. Ham**

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Biomechanical acupuncture originated from the biomechanical approach of treating musculoskeletal pains by Myofascial concepts of Western medicine and Meridian concepts of Traditional Chinese Medicine (TCM).

There have been various attempts to treat musculoskeletal pains using needle stimulations around the East and the West. But practical point of views, most practitioners agree upon the difficulties in choosing exact treatment points. In this paper, a new concept of Biomechanical acupuncture is proposed to solve the difficulties, which is simple and easy to apply to everyday practice but comprehensive enough to integrate modern myofascial concepts of the West and traditional meridian concepts of the East

In the basis of Biomechanical acupuncture, Myofascial concepts don't mean trigger points developed by Janet G. Travell and David G. Simons but biomechanical network of anatomical myofascia spreading through human body. And Acupuncture points in TCM related to 12 Meridian theories are to be used in the treatment of musculoskeletal pains through Myofascial concepts. Owing to ceaseless connection of the whole myofascia, a disorder in one region may be expressed in the form of pain and limitation on certain movement in other part of body mainly in the same myofascial tension line by biomechanical dysfunction. When one attempts to move freely on the condition that one side is fixed, one's body is bound to take compensatory overloadings. As a result, a cause of biomechanical dysfunction gets to be enlarged. Repeated stresses transcending the limited range give rise to a local inflammation or a pain.

According to these concepts I can approach goals of treatment,

1. improvement of biomechanical overloadings

2. restoration of neural function
3. maintenance of optimal alignment

Biomechanical acupuncture doesn't cure and heal anything. All it does set body back to normal so that healing process begins.

**Conclusion:** Biomechanical acupuncture combined prevailing treatment concepts of both the East and the West is a new effective treatment method of Functional Orthopedic Stimulation Therapy (FOST) in the common pain problems arising from musculoskeletal system. Through this new method of treatment, all types of practitioners who use needle stimulations as their main treatment modality can benefit from ease of its application and consistency of its effectiveness.

**Keyword:** Biomechanical acupuncture, Myofascial concepts, Meridian concepts, Musculoskeletal pains, FOST

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**Scientific basis of veterinary acupuncture**

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The Traditional Chinese Veterinary Medicine (acupuncture, moxibustion, tuina, herbal therapy, dietetic indication) has a millennial history in treating animals. The Acupuncture has effects at different levels that are due to antalgic, anti-inflammatory, neuroendocrine, trophic and vasomodulator activity in an integrated system that elicits specific functional responses <sup>[1]</sup>.

There are different ways of stimulating the acupoints: with Chinese needles, hydro-acupuncture, electroacupuncture, laserpuncture and every technique arouses a specific clinical effect <sup>[2]</sup>.

At biochemical interpretation in recent years the knowledge of TCVM has been extended through highly complex experimental studies employing

high-tech instrumentation based on quantum physics theories. This has led to a new "biophysical" interpretation of medicine, and a fuller understanding of how the energy activity of acupoints affects organs and tissues [3].

In TCVM it is usually talk about energy the Chinese Qi: a normal production and flow of energy are properties of physiological condition; scanty production or obstructed flow are symptoms of pathological condition. Qi originates from the major organs and flows in a circulatory system of channels, meridians, along the course of which acupoints are located.

If initially acupuncture has been considered by the Western science as an effective pain therapy for its ability to induce a significant degree of analgesia today must be considered as a complete medicine capable of treating many diseases both of an organic nature that psycho-behavioral.

When we talk about energy, we are approached a biophysical range that is more coherent with Acupuncture effect mechanisms than biochemical interpretation.

It is very significant that Acupuncture has relevant effects at the local level and at general level of organism: in this way there is a perfect tuning on all of biological functions.

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### **Acupuncture for horses**

**M. Gazzola, F. Longo**

Italian Veterinary Acupuncture Society (SIAV – ItVAS), Italy

During Zhou dynasty (974 – 928 B.C.) the Traditional Chinese Veterinary Medicine was separated from Traditional Chinese Medicine for Humans: the first Equine practitioner that we know according history was Zao Fu that he did treat horse by Acupuncture.

From that period until our times the Chinese Medicine is always distinguished in Veterinary and Human range.

Now we use a traditional techniques and modern techniques specific for every species: acupoints, diagnostic system, therapies are different and their efficacy is precise for horses, dogs, cats, zootechnics animals, exotic animals [1].

In horse practice there are different ways of stimulating the acupoints:

Chinese needles (or traditional acupuncture with dry needles) that induce manifest effects on organic metabolism;

Western needles that are very useful in micro-bleeding of acupoints (frequently for Ting Points), in unblock techniques of the energetic channels (meridian obstruction – local therapy) and for specific techniques of the sport medicine (improving of the sport performance);

Hydro-acupuncture in which we can inject in acupoints fresh blood of the horse, iodine in oil, vitamin B, homeopathy and homotoxicology products; hydro-acupuncture produces a good level of muscle relaxation and improve the metabolic capacities in competition horses: it is the best technique to increase the sport performance and for treating some chronic diseases;

Moxibustion, the traditional cigars with many kinds of Artemisia species determines vasodilatation in deep tissue, activation of local receptors (nociceptors A-δ fibers), very useful in horse practice [2];

Electroacupuncture is more effective in treating acute conditions, it induces

the pain disappearance quickly (but the analgic effect has average length) and it is used in anaesthesia (it determines an high significant differences in deep anaesthesia and in reduction of the MAC - minimum alveolar concentration of isoflurane) [3];

Laserpuncture determines effects like the traditional acupuncture; the Low Level Laser Therapy (LLLT) involves the local treatment of various tissues vasodilatation with mastcell degranulation, activation of macrophages and lysozyme, increased circulation in occlusive arterial diseases, reduced blood pressure in hypertension, improved capillary circulation in micro circulatory conditions [4];

Tuina (Chinese massage) is a elaborate system of energetic massage: this dynamic therapy allows to the horse body becomes more active, healthy, more resistant to the pathogenic stimulations [5];

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## 18

### *The peculiarities of acupuncture in the cat*

#### **D. Schmitt**

France

The peculiarities of Acupuncture care of the cat are closely related to specific features of the cat. There are many different breeds of cat on every continent, each with it's own rich genetic history, culminating in the great variability of the coat.

1. The Cat as a Pet or Accompanying Animal?
  - a. Therapy of the Owner by the cat. Discreet companion, knowingly provokes a real passion in it's "Owner," capable of accepting the unacceptable.
  - b. The Therapy of the cat is illuminated in recent years by better understanding of it's psychology.
2. Modes of expression of the cat.

The modes of expression to suffering (psychological) and physical pain are often "the fluidity and purring, taken erroneously to be a sign of contentment". Penetration of the physiological universe of the cat must be often done by further investigations.
- 3 The reactions of the cat to the provision of care, are conditioned by the VERY large permanent interaction with the environment,
  - a. historical conditions (withdrawal),
  - b. recent (the family life of it's owners, environment, social standing of the cat in the house).
  - c. snapshot (development on the conditions of the consultation) prior to the consultation the journey in the cage, the break with HIS territory, the strict conditions of the veterinary clinic.
4. Disorders of multifactorial origins to specific organic reactions (fibrosarcoma, hypertrophic cardio myopathy, cystitis, and renal disease).

5. Treatments of traditional Chinese medicine including acupuncture. Access sensitive, sensual energy state of the cat. A different approach:-
- The massage strokes: harmless gesture and / or therapeutic
  - Preventive herbal medicine.
  - Treatments with needles and moxa
    - Liberation movement of large organic flow on specific points
    - Energy recovery "7 or 9 lives the cat"
    - The modalities of implementation of these conditions and treatment difficulties. Make a clean sweep of all to the benefit of priority from the moment the consciousness of the progress of the act of care. Leverage capital and the patience of a cat therapist taking time.
  - Comment on the description of points and their location on the body. Benchmarks skin, subcutaneous connective, texture and size of muscle masses (with comparative anatomy of man, horse, dog, importance of the appearance of serous So fascia (tissue layers and crushing energy)
  - Consequences of the implantation needles and the application of moxa. The size of the needles

### Conclusion:

- The specificity of the feline species seen through the five elements.
- All items described in theory and those used on the cat's body.
- The notion of acceptance and denial of care. (From the total refusal to refusal of needles), or other manifestations of the syndrome "tiger" until the full collaboration of "Mimi" lying on the table indicating the areas to treat.

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### **Traditional Chinese medicine in equine practice**

#### **F. Longo, M. Gazzola**

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The Traditional Chinese Veterinary Medicine (acupuncture, moxibustion,

tuina, herbal therapy, dietetic indication) has a millennial history in treating horses. In recent years knowledge of TCVM has been extended through highly complex experimental studies employing high-tech instrumentation based on quantum physics theories. This has led to a new "biophysic" interpretation of medicine, and a fuller understanding of how the energy activity of acupoints affects organs and tissues<sup>[1]</sup>.

The Authors' aim to show the use of acupuncture in the clinic of the horse through their professional experience and their collection of clinical evidences.

To treat the disease is essential to formulate a correct "energy diagnosis" means the condition of excess or deficit is expressed through physical and functional signs.

In equine medicine, there is a well-established diagnostic system acupoints (investigated by palpation<sup>[2]</sup>) that allows to identify the organs involved in the disorder and/or the seat of disease of the limbs.

Acupoints as well as the stimulation of the same technique used in therapy were selected based on their traditional indications, but also on the basis of experimental evidence.

They were taken into account various pathological condition. In orthopaedics acupuncture is particularly effective because of its analgesic and anti-inflammatory activities<sup>[3]</sup>, in sports medicine acts in prevention in patients undergoing major efforts and provides a great mental and physical efficiency<sup>[4]</sup>. Also widely used in pain treatment in respect of which the horse is particularly sensitive<sup>[6], [7], [8], [9]</sup>.

In reproduction is used to handle problems during the breeding season of the mare and the stallion, but also in mares in athletic activities with endocrine syndrome<sup>[10], [11], [12], [13], [14], [15], [16]</sup>.

In pneumology acupuncture is used in treating exercise-induced asthma, allergic asthma, COPD for its anti-allergic effect and its action on smooth muscle<sup>[17]</sup>.

The acupoints have trophic and vasomodulator activity: they control the blood circulation at subcutis and dermis levels; in dermatology their

stimulation is very effective in wound healing, allergic dermatitis, dermatosis and in controlling of melanoma <sup>[18], [19]</sup>.

In geriatrics, the use of drugs can be difficult because of side effects in individual with chronic diseases (osteoarthritis, muscle hypotonia, hoof problems, respiratory illness, gastro-enteric troubles, endocrine disorders), in this horses the TCVM offers an excellent opportunity <sup>[20], [21]</sup>.

Independently from the technique employed, it is very significant that Acupuncture has a relevant anti-stress effect: at the local antalgic and anti-inflammatory action corresponds a general effect on biological functions of the organism <sup>[22], [23]</sup>; the acupuncture assures the complete wellbeing of the horse and it acts on global energy of the body resulting "naturally" effective.

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### ***Acupuncture and TCM for dogs***

**F. Minguell**

Spain

Small animals clinical Acupuncture is as different to human acupuncture as Veterinary medicine is to human medicine.

Nevertheless both can learn from the other one. We're going to see that transpositional points from human beings are not exactly situated in dogs. Mirror theories and Meridians traject in animas could explain it.

TVCM diagnosis is very useful to patients approach, dogs "talk" with their clinical signs.

Some examples of most frequent treatments in veterinary clinic will be explained, not only to treat pain conditions but illness with poor prognosis in western medicine as megaesophagus, megacolon, asthma or ethological disorders.

For beginners some help to introduce acupuncture and to integrate it in daily veterinary clinic will be developed, and easy treatments to enhance quality of life of our patients.

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### ***The ground as a manifestation beneath the external pathology of wood element***

**I. Mezei, D. Mezei**

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**Purpose:** Nowadays when the accepted medicine tends to be only evidence based medicine, it is necessary to explain and objectively describe the basic concepts of energetic pathology with neurophysiological and humoral terms, well known to the scientific media, process which is not so easy but

more promising by applying quantum biology to the living processes and the use of appropriate devices to achieve this endeavor, devices build on the principles of quantum physics and physiology.

**Relevance:** Concepts such as liver fire liberation, wind liver, liver qi stagnation can be hardly understood and perceived by the medical world, because of not having an etiopathogenic or pathophysiological correspondence, experimentally proved and accepted by academic medicine.

**Material and method:** In this paper, the authors present the examination results of patients at Tongtian Medical Center, applying the principle of bioresonance and trivector analysis highlighting resonant correlations of items with aspects of TCM pathology and modern concepts of physiology and etiopathogenesis of disease.

The choosen pathology was that of Liver Qi stagnation, which was diagnosed and analyzed using the Electrophysiological Universal System, marketed in Europe as the QXCI / SCIO and the U.S. as the EPFX. The proposed analysis has taken into account both the physiology as well as the pathology as defined by MTC and the MCC.

**Analysis:** Remaining loyal to the principles and diagnostic approach of energetic Elements during the analysis performed, we come to know not only the phenomenon of acute liver pathology = crown of tree, but also the hidden causes, the chinese root, namely a weakness or dysfunction of kidney energy, ie the ancestral energy or Zhong Qi or otherwise in modern terms, the specific ground (Terrain) determined by genetic chromosomal influences. This data will allow us further a holistic therapeutic approach to patients and disease.

**Results:** So here, the complex energetic pathology can be understood and accepted as a way to broaden clinical and scientific connections and offering new interpretations worth of consideration in the therapeutic approach towards patients. We understand now how perverse energy arises from bacterial and parasitic toxins interfering with enzymatic mechanisms and cell energy resulting in blockages or neuro-endocrine-metabolic dysfunction =Liver Qi stasis.

**Conclusion:** In order to be accepted by academic and evidence based

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medicine acupuncture has to use modern concepts and devices to explain its particular terminology as well as to point to the root of the diseases explained in terms of genetics and genomics thus following the words of Hippocrates too, in remembering that there are no diseases but diseased individuals.

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### ***Acupuncture as a therapeutic modality of pemphigus vulgaris***

**E. Iliev, V. Broshtilova**

**Introduction:** Pemphigus is a life-threatening autoimmune skin disease that should be treated with continuing corticosteroid courses. Certain recurrent cases requires life-long therapy. The side effects of cortico therapy are well-known, and hardly tolerable, therefore in refract-ant cases adjunctant alternative regimens may be required to taper or subside the aggressive immuno suppressive medications.

**Materials and methods:** fourteen patients (10 women and 4 men) aged 28-69 years with chronic relapsant pemphigus vulgaris were treated with two cycles of a 15-day course of acupuncture with a one-month break between the two sessions. Continuing three-month therapy of one acupuncture procedure per week was introduced. Immunomodulating acu points were used.

**Results:** Twelve patients experienced a very good therapeutic response with reduction of the corticosteroid medication to half of the initial dose.

**Conclusions:** Acupuncture may be a beneficial tool to be introduced in the complex therapeutic approach in patients with pemphigus vulgaris.

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### ***Moxibustion (metsa) in Tibetan medicine***

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Moxibustion is a widely used therapeutic practice in Tibetan medicine. According to the threefold humoral concept of Tibetan medicine it is mainly used for symptoms caused by cold diseases like phlegm (badken) and wind (rlung) disorders. This covers indications like low ‚digestive fire‘ (medrod), indigestion, stomach distention, vertigo, insomnia, nervousness, anxiety, depression, joint pains, superficial fever (empty fever), post-menopause syndrome and some neurological disorders and others.

Moxibustion can be also used in cold bile (tripa) diseases. Tibetan medicine differentiates several types of moxa methods.

The moxibustion concept of Tibetan medicine can be easily integrated into other CAM treatment concepts as physical therapy but also as a supporting method for psychotherapeutic treatments.

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### ***A randomized controlled trial for the use of qigong in the treatment of pre and mild essential hypertension***

**J.-E. Park<sup>1</sup>, S. Hong<sup>2</sup>, T. Park<sup>3</sup>, Y. Liu<sup>1</sup>, J.-E. Kim<sup>1</sup>, T.-H. Kim<sup>1</sup>, A.-R. Kim<sup>1</sup>, S.-Y. Jung<sup>1</sup>, H. Park<sup>1</sup>, K.-M. Shin, S.-M. Choi<sup>1\*</sup>**

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**Background:** Hypertension is a risk factor for cardiovascular disease, and the

prevalence of hypertension tends to increase with age. Current treatments for hypertension have side effects and poor adherence. Qigong has been studied as an alternative therapy for hypertension; however, the types of qigong used in those studies were diverse, and there have not been many well-designed randomized controlled trials. Our objective is to evaluate the effects of qigong on blood pressure, health status and hormone levels for pre- or mild hypertension.

**Methods:** Forty subjects with pre- or mild hypertension were randomized to either the qigong exercise group or the non-treated group. Participants in the qigong group conducted qigong exercises 5 times per week for 8 weeks, and participants in the non-treated group maintained their current lifestyle, including diet and exercise. The use of antihypertensive medication was not permitted. The primary endpoint was a change in patient blood pressure. Secondary endpoints were patient health status (as measured by the MYMOP2 questionnaires) and changes in hormone levels.

**Results:** Of the 40 participants that were randomized, 35 completed the study. Systolic and Diastolic blood pressure were significantly decreased after qigong treatment compare to baseline, in only qigong group. ( $p < .001$  in SBP,  $p < .0001$  in DBP) In non-treated group, there was no significant difference in blood pressure. Change of blood pressure between qigong and non-treated group was significant. ( $p < .01$  in SBP and DBP) The score of MYMOP2 showed significant decrease in qigong group than non-treated group. ( $p = .035$ ) Any of hormones among renin, angiotensin, cortisol, norepinephrine, the difference was not significant between two groups.

**Conclusion:** Qigong appears safe and positive effect on blood pressure and health status in pre and mild hypertension patients. Further long-term studies with a larger number of subjects are warranted.

**Trial registration:** Clinical Research Information Service KCT0000140

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### ***Bioelectricity circulatory system as the 9th system of human body***

**H. Sukarto**

MD, Indonesian Association of Medical Acupuncture

Every organ in our body has their own bio-electricity system which can be recorded accurately from superficial such as: ECG, EEG, EMG, Electroneurography, Electro-oculogram etc. Those bio-electricity form a net / system called: Bio-electricity Circulatory System. By using the Meridian Analyzer Device this system can be detected as the 9th functional system beside the 8 system we already know. This is a software where the function of anatomical hard ware is regulated. Stagnant meridian / channel can be boosted by Bio-electricity Resonance Booster / device to cure the impairment, the result are good and satisfactory.

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### ***Treating Hashimoto's disease with acupuncture plus psychotherapy***

**S. Elenkova, V. Pozharashki**

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**Objectives and Purpose:** Conventional treatments are partially effective for patients having Hashimoto's disease- unless the disease has progressed to hypothyroidism they most likely treat the symptoms, rather the pathogenic substrate/high level of anti-thyroid antibodies/ and the human individual as a whole.

We tested the hypothesis that the integrative treating approach Acupuncture + Psychotherapy can sustainably reduce the rates of anti-thyroid antibodies and manifestation of Hashimoto's disease.

Participants: 34 patients /28 female and 6 male / aged between 23-52, with clinically and laboratory proven Hashimoto's disease.

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**Method:** The participants were allocated to a 1st treatment group /n=11/ with acupuncture + psychotherapy, 2nd treatment group /n=11/ with sham-acupuncture and psychotherapy and 3rd /n=12/ control group.

For the 1st group acupuncture needles were inserted twice a week for 10 weeks in acupuncture points. Psychotherapy sessions were carried on once a week parallel to acupuncture. For the 2nd group acupuncture needles were inserted in non-acupoints twice a week for 10 weeks and psychotherapy sessions were carried on the same frequency as the 1st group.

**Analysis:** For all the three groups the rates of anti-thyroid antibodies were measured before the treatment course, after the last session and 3 months later. A questioner of symptoms was also filled before/after treatment and 3 months later.

**Results:** The repeated measurement showed reduction in rates of anti-thyroid antibodies and symptoms of Hashimoto's disease /in 72.72 % of the patients from 1st group and 36.36 % of the patients from 2nd group respectively/, while for the control group the same parameters remained almost unchanged. This trend continued in following up 3 months after.

**Conclusions:** We find that acupuncture supported by psychotherapy has definitely positive effect on the decrease of autoimmune activity and improvement of the subjective state in patients with Hashimoto's disease. Both methods are expected to be of use in integrative treatment of Hashimoto's thyroiditis.

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***Moxibustion for pre & stage I hypertension: A pilot randomized controlled open trial***

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**Purpose:** The purpose of this study is to evaluate the effects of moxibustion

on blood pressure for pre or stage I hypertension.

**Relevance:** Hypertension is a risk factor for cardiovascular disease, and the prevalence of hypertension tends to increase with age. Current treatments for hypertension have side effects and poor adherence.

**Participants:** Forty five subjects with pre or stage I hypertension will be randomized. Participants will be randomly assigned into three groups, namely, treatment A, treatment B, and waiting list (control).

The inclusion criteria are as follows: (1) patient age between 19 and 65 years, (2) systolic blood pressure between 120 and 159 mm Hg and/or diastolic blood pressure (DBP) between 80 and 99 mm Hg as measured in a sitting position, and (3) the absence of objective signs of hypertension end-stage disease.

**Methods:** Participants in the treatment A group will conduct indirect moxibustion 2 times per week for 4 weeks, and Participants in the treatment B group will conduct indirect moxibustion 3 times per week for 4 weeks, participants in the non-treated group will maintain their current lifestyle, including diet and exercise. The use of antihypertensive medication is not permitted. The primary endpoint is a change in patient blood pressure. Secondary endpoints are BMI, lipid profile, EQ5D and HRV.

**Analysis:** The data will be analysed with student t-test and ANOVA ( $p < 0.05$ ).

**Results - Conclusions:** The results of this study will help to establish the optimal approach for the care of adults with pre or stage I hypertension.

**Acknowledgments and Funding:** This study was supported by the Korea Institute of Oriental Medicine (K11203).

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***Consumption of ephedra-containing CHP does not increase the occurrence of CVD: A population-based study***

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**Relevance and Purpose:** After reviewing some adverse events, such as cardiovascular disease<sup>2</sup>, regarding the use of ephedra-containing dietary supplements, the Food and Drug Administration banned the sale of ephedra products on April 12, 2004. However, according to standard prescriptions recommended by the Committee on Chinese Medicine and Pharmacy in Taiwan, ephedra is still a popular ingredient of many Chinese herbal formulas<sup>3</sup>. This paper examined the association between prescribed ephedra-containing Chinese herbal products (CHP) and cardiovascular disease by using the population-based database in Taiwan.

**Methods and Analysis:** All patients newly diagnosed with cardiovascular disease (CVD) from 2006 to 2007 as case subjects, and a random sample of the entire insured population from 1997 to 2007 excluding patients with CVD, including myocardial infarction, stroke, arrhythmias, or cardiac sudden death, as control subjects, were selected from the National Health Insurance reimbursement database<sup>4</sup>. Subjects with incomplete data or any hyperlipidemia-related diagnosis were also excluded. For the association between prescribed ephedra-containing CHP and the occurrence of CVD, we used multivariable logistic regression models to estimate odds ratios and 95% confidence intervals. Models were adjusted for age, sex, residence, prescription of acetazolamide<sup>5</sup> and/or labetalol<sup>6</sup>, and cumulative doses of prescribed ephedra-containing CHP.

**Result:** There were 1,120 case subjects and 41,409 control subjects in final analysis. There was a significant reduce of CVD development for consuming ephedra-related CHP. (OR=0.183, p<0.001). Only three items (Xiao Xu Ming Shang OR=2.212, p<0.001; Gui Qi Shao Yao Zhi Mu Shang OR=1.701, p<0.001;

She Gan Ma Huang Shang OR=1.441, p=0.006) out of total 24 ephedra-related CHP were associated with the risk of CVD development. No statistically linear dose-response relationship was observed between the prescribed dose of ephedra.

**Conclusions:** Consumption of ephedra-containing CHP does not increase the occurrence of CVD.

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## 29

### *A study of factors influencing the DEQI sensation in acupuncture*

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**Purpose:** The purpose of this study is to investigate differences in the kind, intensity and needling depth of deqi sensation by patients' gender, age, BMI

and sensitivity.

### Relevance

**Participants:** sixty-four healthy volunteers (mean age  $26.51 \pm 4.72$ , range 22–39) who studied anatomy, meridianology, acupuncture & moxibustion more than five years at Dong-guk University, Go-yang, Korea were invited to take part in an investigation of the sensations associated with acupuncture needling.

**Methods:** Needling was done on Hegu (LI4) point in the hand by the other hand of oneself and Zusanli (ST36) point in the leg randomly. After obtaining deqi, the participants were asked the kind of deqi, Intensity of deqi and depth of deqi.

**Analysis:** The data were analysed with student t-test and one-way ANOVA with Bonferroni ( $p < 0.05$ ).

**Results:** As for the distribution of deqi Sensation spots, there was no statistically significant difference found by acupoints and needling methods. As for the intensity of deqi sensation in Hegu and Zusanli, a group responding a sharp degree of sensitivity showed a significantly higher degree of intensity than the other group responding a dull degree ( $p < 0.01$ ).

A group responding a medium degree of sensitivity showed a deeper needling depth in Hegu than the other group responding a sharp or very sharp degree of sensitivity ( $p < 0.01$ ), and when patients responded a dull or sharp degree of sensitivity, they showed a shallower needling depth than others responding a very sharp degree of sensitivity ( $p < 0.001$ ).

Hegu was found to be significantly higher in the intensity ( $P < 0.001$ ), and the needling depth was significantly higher in Zusanli than Hegu ( $P < 0.001$ ). However, in the intensity of deqi sensation, there was no difference found by needling methods such as rotating (back-and-forth or one direction) and pistoning (up-and-down motion) of the needle ( $p > 0.05$ ).

In needle grasp (acupuncture performers' sensation), male patients acquired significantly higher numbers of sensations spots than female patients, and as BMI became higher ( $P < 0.05$ ), and the intensity (VAS) of deqi sensation became higher ( $P < 0.05$ ), they acquired significantly higher number of

needle grasp sensation spots. In addition, a group responding a sharp degree of sensitivity acquired more sensations spots of needle grasp than the other group responding a dull degree of sensitivity ( $p < 0.05$ ). However, there was no significant difference found in whether needle grasp exists by the needling depth.

**Conclusions:** As for deqi sensation of the research subjects, there were some differences found by their sensitivity and acupoints, and in the needling depth that gives patients deqi sensation, there was some difference found by their acupoints. Besides, in needle grasp sensation of acupuncture performers, there was some difference found by patients' gender and degrees of obesity. However, there was no difference found in the kinds of needling methods by patients' gender, age and acupuncture procedure methods.

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### ***An anti-inflammatory pathway that can explain the role of acupuncture in immune homeostasis***

**M. Karavis, N. Chairetakis, Ch. Skoura**

Greece

In the early '90s acupuncture was believed to be an efficient analgesic technique. Many pain conditions that have been treated by acupuncture, such as tendonitis, sinusitis, asthma, osteoarthritis, rheumatoid arthritis, involve inflammation. Lately, evidence has accumulated regarding the fact that acupuncture has anti-inflammatory effects, in addition to analgesia. Although opioids are known to have anti-inflammatory properties within the central nervous system and in the periphery, naloxone only partially blocks the anti-inflammatory effect of acupuncture.

Inflammation is a homeostatic response, a reaction to infection, injury or trauma. The onset of inflammation is characterized by release of pro-inflammatory mediators (TNF, IL-1, adhesion molecules, vasoactive mediators and reactive oxygen species). Although, inadequate production of cytokines leads to ongoing (and chronic) inflammation, excessive production can

be injurious for the organism. Homeostatic response is balanced by anti-inflammatory factors such as IL-10, IL-4, IL-1 receptor antagonists etc.

All these peripheral molecules, apart from pro and anti inflammatory action, signal inflammation to the brain's neuro-endocrine pathways, and more specific to the hypothalamo-pituitary-adrenal (HPA) axis and the sympathetic nervous system (SNS). Both, laboratory and clinical evidence have shown the existence of a cross talking, negative feedback between the autonomic nervous system (mainly sympathetic) and the innate immunity.

Recently, Kevin J. Tracey et al, described the anti-inflammatory role of the vagus nerve in animal models, a new pathway of neural inhibition of inflammation. They proved that cytokines transmit signals to the brain through the vagal sensory neurons (vagusotomy inhibits the stimulation of the HPA axis and norepinephrine axis).

This is the first reference for the existence of a parasympathetic control on systemic and/or local inflammation. Acetylcholine, the neurotransmitter of vagus nerve, binds to the  $\alpha 7$  subunit of the nicotinic acetylcholine receptor ( $\alpha 7nAChR$ ) on macrophages. Stimulation of the afferent pathway of the vagal nerve induces immunosuppression controlling TNF production of the spleen macrophages.

The description of the arc reflex (sensory and motor pathway) through which the vagus nerve participates in immunological homeostasis, was a necessity. The catecholaminergic splenic nerve fibers are the neural connection between the vagus nerve and the spleen macrophages. Animal experiments indicate that vagus nerve drives organisms to achieve rapid and precise control of inflammation (systemic cytokine production) through celiac-superior mesenteric plexus ganglia.

The question for medical acupuncturists was the following: Is acupuncture a treatment through which the cholinergic anti-inflammatory reflex controls inflammation (decreasing TNF production)? In our review we will describe the auricular and body acupuncture points which act as immunoregulators through the vagus nerve. These points are in use for centuries by Chinese

specialists for the control of symptoms as fever, anorexia, fatigue, somnolence (cytokine overproduction) and they are considered as a potentially useful treatment of various chronic inflammatory disorders; Crohn's disease, rheumatoid arthritis, autoimmune (allergic) diseases, colitis, inflammatory bowel disease, arthritis, type 2 diabetes, atherosclerosis, multiple sclerosis, Alzheimer's disease etc, where cytokine overproduction has been implicated.

To conclude, we will mention the role of the spleen in controlling inflammation, as the prominent source of TNF-alpha circulation. Our statement proves that spleen, as an organ, is more significant than believed. This perspective comes more in accordance to its role in Traditional Chinese Medicine.

This decade opens up a new chapter in research in the field of acupuncture regarding the biological mechanisms involved in its anti-inflammatory action. In the near future, acupuncture will be an absolute indication for treating inflammation - regardless the cause. It will not surprise us the use of acupuncture as an adjunct therapy to the conventional medical treatment of a number of chronic inflammatory and autoimmune diseases.

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### ***In search of the one needle cure - The assessment and treatment of myofascial trigger point pain***

**M. Cummings**

United Kingdom

This presentation will focus on primary myofascial pain and seeking the one needle cure. It will consider how such patients present, and the features of their stories that either direct the practitioner towards or away from the diagnosis of primary myofascial pain. Physical assessment by examination of movement, by pain provocation, by palpation and by needling will be considered. Finally, what do you do if the cure is not sustained?

### ***Contralateral acupuncture in the treatment of neuropathic pain***

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It's been shown that relationships exist between the two sides of the spinal cord and electrophysiological studies have shown that a significant portion of the spinal cord neurons are inhibited by noxious stimulation in the contralateral homologous area.

The neurons that respond better to a stimulus of contralateral acupuncture are Wide Dynamic Range (WDR) neurons; the noxious-specific neurons (NS) respond less and seems to be more specific in response to an ipsilateral stimulus. The results of recent studies show that unilateral interventions, including acupuncture, may produce contralateral or bilateral effects.

Some authors show that, in neuropathic rats, a contralateral injection of local anesthetic is able to reduce the pain-related behaviors and the inflammatory edema. These observations suggest that spinal neurons play an important role in producing contralateral responses.

It's also highlighted that there are connections between the two sides of the spinal cord which can, under specific conditions, to participate in maintaining the abnormal medullary neuronal excitability show in pathological conditions associated with neuropathic pain. Le Bars and colleagues have shown that the activity of spinal and trigeminal neurons can be inhibited by noxious stimuli applied to areas of the body distant from the receptive fields of neurons analyzed and how this phenomenon is reversible with naloxone.

It's well known that the acupuncture induces the release of endogenous opioid peptides, as demonstrated the fact that the acupuncture analgesia is

inhibited by naloxone.

Following these findings, we hypothesized that contralateral stimulation can modulate the nociceptive response of neurons which refer to an injured area. We wanted to assess whether the contralateral electroacupuncture (EAP) was effective in controlling chronic pain in postherpetic neuralgia (PHN) and lumbar herniated disk radiculopathy (LHDR).

We treated 25 patients with thoracic PHN who received an amount of sessions of EAP, which was continued until the symptoms improve; if after 8 sessions not seen any improvement, the treatment was discontinued and passed to other therapy. Each session was conducted, 3 times per week, with metameric stimulation contralateral to pain, low frequency (2 Hz) and intensity between 2 to 4 mA, depending on the patient's pain threshold.

The points used vary depending on neurologic injury, but were always homometameric and contralateral to the lesion. Pain was measured using the McGill Pain Questionnaire (MPQ). The statistical analysis between the results recorded before and after the therapeutic cycle was performed with t-test for paired data.

EAP has proven effective for the relief of the pain 19 patients reported a good result and 6 no result.

For LHDR were studied 56 patients, 28 males and 28 females, aged between 29 and 78 years with a mean of  $52.70 \pm 13.29$ , suffering from sciatica due to LHD diagnosed with:

- Physical examination,
- EMG positive for radicular pain;
- CT or MRI positive for herniated disk.

45 patients had slipped disk at L5-S1 and 11 patients L4-L5. The treatment consisted of 12 sessions of EAP, two per week. The following points contralateral were stimulated: the two most painful lumbar trigger points, BL 50 and BL 54 stimulated in pairs and BL 57 and BL 60 stimulated in pairs. We used a low frequency: 2 Hz and high intensity: 2-10 mAmp, the session lasted

20 minutes. The needles were always infixed deeply in the muscles and not manipulated manually.

Pain was measured with the McGill Pain Questionnaire before therapy, at the end of therapy, after 1, 3 and 6 months. There is a significant decrease in pain at the end of therapy. A total of 49 patients achieved a good and comprehensive one, only 7 patients found no benefit from therapy.

The contralateral acupunctural stimulation can be recommended as a conservative approach in the treatment of PHN and LHDR.

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#### ***Postoperative electroacupuncture analgesia. The Greek study***

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We have study the postoperative electroacupuncture effects in patients in radical prostatectomy. The study was a RCT (randomized controlled trial). We compared the action of a multimodal analgesia model in postoperative combination of 2 analgesics, ketamine and tramadol by using continuous IV infusion pumps, with or without electroacupuncture (E/A) technique.

Seventy patients undergoing radical prostatectomy were randomly assigned to two different groups: Ketamine + Tramadol +placebo E/A (n=35) and Ketamine + Tramadol +E/A (n=35). We applied E/A in 100Hz frequency at ST36 bilateral during the closure of the abdominal walls and in 4Hz at ST36 and LI4 bilateral just after extubation.

We evaluate the postoperative pain at 45min, 2h, 6h, 12h and 24h by recording patients, NRS pain at relax and movement. We also estimate the PPI

scale, and the McGill(SF-MPQ)one. We use the electronic pressure algometer and the STAI Y-6 item, and we measured the cortisol levels. Rescue analgesia, side effects and vital signs were also estimated.

The Pain scores with NRS, PPI, McGill scales were significantly lower in Tramadol+Ketamine+E/A group in all measurements. The Pain scores with electronic pressure algometer significantly higher in Tramadol+Ketamine+E/A group in all assessments. There were fewer patients with nausea, vomiting, pruritus, sleeplessness and nightmares in Tramadol+Ketamine+E/A group, but there weren't significantly reduction.

Patients were significantly satisfied with the analgesia, especially in Tramadol+Ketamine+E/A group. In Tramadol+Ketamine+E/A group there were significantly decrease in cortisol levels.

In conclusion the use of electroacupuncture for postoperative analgesia is a helpful method during radical prostatectomy and can decrease the postoperative pain and the opioids adverse effects. The patients are more positive and with a wellbeing feeling, with improved mood, with the use of electroacupuncture.

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#### ***Clinical experiences in analgesic therapy according to a new diagnostic - Therapeutic model of auricular acupuncture***

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Auriculotherapy or Ear Acupuncture is a form of acupuncture that uses the outer ear for diagnostic and therapeutic.

Founding principle of this discipline is that in the ear (microsystem) are represented structures and functions of the body (auricular map), in a two-way relationship diagnosis and treatment.

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The formulation of the analgesic therapy in the treatment protocol involves the use of two classes of ear acupuncture points, functional points and neurological reflexes points. The first ones have general action (analgesic, anxiolytic, anti-inflammatory...) and they should be included in a clinical criterion-related therapeutic effect to be achieved. The neuro reflex points are chosen in an original model, proposed by our school, which is based on the assumption that the representation of pain in the outer ear is related to its etiology. The auricular diagnosis, palpation and measurement electrical skin resistance, also allows to distinguish between primary and secondary pain (referred and reflected). This model allows to practice auricular acupuncture regardless rigid adherence to the maps of most accredited schools: French and Chinese, improving the effectiveness of therapy. To validate this model were enrolled 180 patients with acute pain (less than 15 days), divided into three groups. All patients received auricular stimulation with the insertion of a single needle semipermanent, positioned ipsilateral to the site of pain. In patients of group A point on which to place the semipermanent needle was identified as the most sensitive to palpation (pressure pain test) present in the scaphoid fossa. In patients of group B, the point where place the needle was identified according to anamnestic criterion (place where the pain is felt more intensely). To locate the outer ear, ipsilateral to the site of pain, the points on which to apply the stimulation with the semipermanent needle was used to "Auricular Sectogram". In patients of group C the semipermanent needle was placed on a spot on the lobe ipsilateral to the site of pain. The pattern of pain was assessed using the NRS (Numerical Rating Scale) This scale was administered 5 minutes before "Pressure Pain Test" (T0) and at time T1 (1 h after stimulation headset), T2 (12 hours after stimulation ear) T3 (24 h after stimulation ear) Patients were divided into responders (PR), patients who achieved a reduction in pain intensity (in one of 3 readings T1, T2, T3) is equal to or greater than 50%, partially responders (PPR), patients who have experienced a reduction of pain between 50% and 25%, non-responders (PNR patients with pain reduction less than 25%. For the comparison between groups in treatment was performed one-way analysis of variance for quantitative variables and analysis of variance by ranks one-way Kruskal-Wallis  $\rightarrow$  for ordinal variables. In conservatively,

the pain, although the measured scale Numeric (SEA), was treated as ordinal variable. To compare the difference in pain to the different times, within each treatment, has been applied the test of the sign for paired data and Wilcoxon. The independence between qualitative variables was tested by chi-square. For the level of statistical significance was chosen error first type of 5%. The analyzes were carried out with STATA 11.0.

### Results and Discussion:

Among the three treatment groups were not significant differences in age (ANOVA  $F = 0.07$ ;

$p = 0.93$ ), the distribution between the sexes ( $\chi^2 = 0.54$ ,  $p = 0.76$ ), or in pain at time t0 (KW  $\chi^2 = 0.67$ ,  $P = 0.72$ ).

Significant differences in pain were observed at t2 and t3 (KW  $\chi^2 = 17.2$ ,  $P = 0.0002$ , KW  $\chi^2 = 27.5$ ,  $P = 0.0001$ , respectively) with lower values in group A, followed from group B and C. Even the minimum value observed at different times after treatment was found to differ significantly among the groups (KW  $\chi^2 = 22.4$ ,  $P = 0.0001$ ) with minimum values in group A followed by group B and C.

Considering the response to treatment in terms of percentage reduction in pain was observed a statistically significant difference between groups (KW  $\chi^2 = 25.6$ ,  $P = 0.0001$ ) with the maximum reduction in Group A followed by B and C.

Analyzing the data by treatment group at different times, significant differences were observed in reducing pain in all groups (Sign Rank test: Prob  $|z| < 0.05$ ).

The data obtained indicate that the pain appears to decrease at different times in all groups. Moreover, these declines appear to depend as intensity variation from the group where patients were assigned, with the maximum reduction significantly more frequent among patients treated with the Pressure Pain test, followed by the system based on the maps and finally from that based on random positioning.

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### **Acupuncture treatment of low back pain**

**C. Chan**

President of ICMART, Immediate Past President of the Australian Medical Acupuncture College

**Purpose:** Small study to establish the effectiveness of acupuncture treatment for low back pain.

**Aims:** Pilot study to serve as a model for a larger study.

**Methods:** Over a four month period 43 people were recruited for this study. All cases of low back pain +/- sciatica were accepted regardless of the underlying pathology. The type of cases included disc degeneration, disc prolapse, spinal stenosis, spondylolisthesis, scoliosis and post spinal surgery pain. The spinal surgery was performed more than 2 years earlier in all cases.

This is a deliberately simple study where all patients received a standard treatment protocol of needle acupuncture and in some cases electroacupuncture was added.

Pain was measured using a visual analogue scale 1-10, with 0 = no pain, 10 = maximum pain.

**Results:** Meaningful pain reduction achieved in 80% of patients. The average entry pain score was 7.7 and the average pain score at the end of treatment was 3.7.

**Conclusions:** The results suggest that the acupuncture treatment protocol used in this study is of benefit in managing non-malignant low back pain +/- sciatica.

Acupuncture treatment of low back pain merits further investigation

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### **Use of the recurrence graphs on the evaluation of acupuncture treatments**

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**Purpose:** To establish the usefulness of the recurrence graphs technique in the interpretation of data from heart rate variability (HRV) measurements from patients treated with medical acupuncture, and its comparison with non treated subjects, both in a quantitative and a qualitative basis.

**Relevance:** The use of non linear techniques is a growing tendency in the study of natural sciences, and are being progressively presented as valid options to their correspondent linear measuring systems. Considering that the application of acupuncture techniques promote non linear answers within the complex psychosomatics systems under their stimulation, it may be understood that the effects obtained under acupuncture procedures and treatments might be regarded as behaviors subject to chaos theory analysis, among which we find the HRV and its interpretation by the recurrence graphs.

**Participants:** Patients from the Outpatient Assistance Service of Bauru State Hospital, either undergoing treatment with medical acupuncture or not subject to this kind of treatment.

**Methods:** Registration of the HRV was taken for each patient, in a resting condition. The study group had the HRV registered initially without needling, and subsequently with needling of PC6. Control group had the HRV registered without needling for the whole period. Both study and control groups had a later retest without needling, being the study group after medical acupuncture treatment, and the control group without acupuncture treatment.

**Analysis:** The HRV data was interpreted with the help of recurrence graphs, both visually and statistically.

**Results:** The effects of acute needling could be compared with those not

needed, as well as the effect of acupuncture treatment could be compared both intra group (patient as his own control) and inter group (treated vs non treated).

**Conclusions:** Recurrence graphs are an efficient and practical tool to support the investigation with non linear techniques, both in the scope of Western Modern Medicine and Traditional Chinese Medicine, allowing the development and stimulating the integration of both medical trends.

**Biography:** President ICMART. Immediate Past President Australian Medical Acupuncture College. Medical acupuncturist in private practice.

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### ***Meridian bioresonance with organotropic regulation for anxiety management***

**D. Zagklis, I.I. Zagkli, T. Christidis**

Greece

In this abstract the term "Bioresonance" will be defined as is a technique in which we combine acupuncture theory and homeopathy to process the electromagnetic information of the human body.

Meridian bioresonance regulation with organotropic regulation for anxiety treatment was used in this study. The method was applied with individual programming, for every patient, for the Bioresonance machine IMEDIS based on individual measurements of meridian function using the VegaTest method (vegetative test according to H.Schimmel). In addition to the meridian regulation, target organ regulation for surrenal glands, thyroid, and thalamus of the brain was achieved, with proper normal tone for autonomous nervous system.

The sample consisted of 80 persons. Both the the treated group and the control group consisted of 40 patients: 15 men and 25 women.

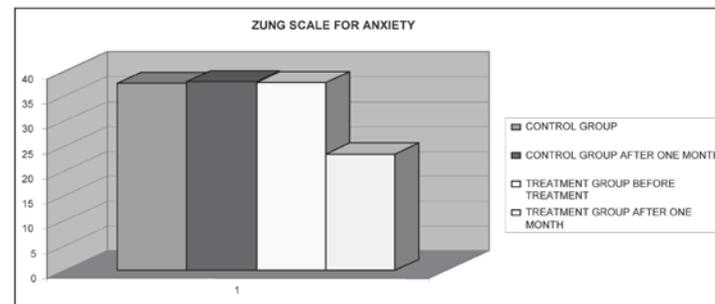
In both groups, the self rating scale of W. K. Zung for the anxiety was administrated.

The average score for the control group was 37.53 and the average for the treatment group was 37.82. At the end of the session the corrected information from the body was irradiated and recorded electromagnetically to neutral homeopathy globules with a diameter of 4000µm. Starting the next day, each of the patients took a specific quantity of these globules that were individualized for them.

After a month of therapy, the Zung test was administrated again, both for the treatment group and for the control group to whom no specific therapy for anxiety had been administered.

**Results:** We take an average score of 37.64 for the control and an average of 23.33 for the treated group with a statistical significance  $P < 0.04$ . In percentage-wise it corresponds to an improvement of 38.4%.

This method can improve the anxiety rapidly and without side effects



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### ***Effective needless acupuncture using crystal light therapy (dielectric resonance). A new complimentary treatment modality?***

**M. Tarabe, M. Batakis, T. Theodoratou, G. Fazakis**

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**Aims:** We report the effect of Crystalline Energy (Low Level Light Therapy) on

the heart rate variability (HRV) before, during and after stimulation of acupoint Bai Hui (Hundred Convergences, GV 20) in adults with specially designed acupuncture wands which help to blend the Crystalline light energy with tapping into the Chinese Meridian points of Traditional Acupuncture. These are the first data reported concerning HRV, obtained with Crystal Light Therapy (Dielectric Resonance) acupuncture equipment.

**Patients and Methods:** The investigations were carried out in 22 adult volunteers with a mean age of 44.86 yrs (range 23-75 yrs). Stimulation was performed.

(GV 20) with painless Sapphire Crystal light Energy.

**Results:** HRV showed remarkable influences which we present in detail. The evaluation parameter LF/HF ratio (low frequency/high frequency ratio and SDNN) from the HRV spectral analysis showed substantial positive influences during stimulation, which is presented in details.

**Conclusions:** Our main conclusion is that continuous CLT through acupoint wands can produce non-invasive, painless, gentle, synergistic positive biological effects.

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#### ***Cerebral Neurocircuitry and acupuncture interactions***

##### **K. Theodoratou**

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A pinkish-grey mass of tissue which weighs about 1.5 kilograms and feels greasy to the touch. Our brain comprises about 1 trillion neurons. The human brain contains literally hundreds of trillions of possible connections (called synapses), as a single neuron may project to between 5,000 and 10,000 other ones; it is at these tiny sites where the brain carries out the main information processing procedures.

Among the first people to realize that the brain was the organ controlling of the mind and behavior were the ancient Greeks. Plato was the first to

suggest that the brain was the organ of reasoning, Galen believed that the 'animated spirit' resided in the ventricles. Inspired by them, much later René Descartes argued that most part of our behavior is not 'self-willed' by the soul, but is 'mechanical' and 'reflexive'; and breakthrough was made by Galvani who discovered that the 'force' included in the nervous tissue was not animated spirit but electricity – thereby refuting Galen's doctrine. During the contemporary era, the discoveries made by Golgi, Ramón y Cajal and Sherrington led to the experimental evidence by Young and later by Hodgkin/Huxley regarding the formation and propagation of the action potential (nerve impulse).

Neural encoding is the procedure through which the neuron converts the physical energy of a stimulus to electrical activity, finally representing forms of stimulation. The cognitive function refers to all the procedures through which the sensation is being transformed, redacted, combined, stored, recalled or used.

Furthermore, even from the earlier Kandel theories of acquired behavior patterns that regulate the inhibitory and receptor transmitters renders the following: the amount of neurotransmitters deriving from the neuron is not equal in quantity but depends on both the internal and external regulatory procedures. Perhaps this is the reason why the Chinese observed: stimuli from different points trigger a guided neural response and, at some points, combinations cause to a certain effect. An in-depth study and an eventual mapping of the complex brain circuitry would enlighten us 1. regarding the negative or positive impact of acupuncture, 2. regarding the extent of the results and 3. regarding any psychological effects.

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#### ***Stress-parainflammation-extracellular matrix-depression: Can the interference field be the common link?***

##### **G. Papathanasiou**

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All organisms must maintain a complex dynamic equilibrium, or homeostasis, which is constantly challenged by physical, chemical, or biological adverse agents termed stressors. Stress is the reaction of the organism to stressors and occurs when homeostasis is threatened or perceived to be so. The stress response is mediated by the stress system partly located in the central nervous system and partly in peripheral organs. The central components of the stress system are found in the hypothalamus and the brain stem whereas the peripheral components include the peripheral limbs of hypothalamic-pituitary-adrenal (HPA) axis and the efferent sympathetic adrenomedullary system. Current research indicates that chronic stress activates processes in nervous, endocrine and immune domains. These processes operate in an interdependent and integrated manner rather than as separated physiological processes using the common language of many chemical substances such as peptides, neurotransmitters, endocannabinoids and cytokines. Beside the central stress effects, it seems that the effects of stress in the periphery, and more specifically, in the functional system of the extracellular matrix (ECM) are of equal importance. ECM is considered to be a peripheral integration level of stress information due to the reciprocal relationships that do exist between capillary bed (capillaries and lymph vessels), ground substance, terminal autonomic axons, connective tissue cells (mast cells, lymphocytes, fibroblasts etc) and organ parenchymal cells. Thirty years ago stress was regarded as immunosuppressive. Recent evidence, however, indicates that stress hormones influence the immune response in a less monochromatic way. Systemically, they exert mostly anti-inflammatory effects and induce a TH2 shift, while in certain local responses they may induce pro-inflammatory activities. This is due to the induction of pro-inflammatory cytokines and the activation of the CRH-Mast cell-Histamine Axis in such situations. These reactions take place especially under exposure to psychosocial stress and very often in terms of low grade inflammation, also known as parainflammation. Parainflammation seems to be the common denominator of all interference fields, irrespective of the nature of the stressor who transformed part of a certain tissue to an interference field. This means that the peripheral inflammatory profile of a patient stays in close relationship with the number and intensity of the interference fields of this patient. Since stress can

aggravate the peripheral (para)inflammation, it seems reasonable to assume that it can also potentiate the clinical burden of present interference fields. Recent findings indicate that patients with major depression exhibit increased peripheral blood inflammatory biomarkers, including inflammatory cytokines, which have been shown to access the brain and interact with virtually every pathophysiology domain, known to be involved in depression. This may partly explain why after a major stress event symptoms may start (second blow) as well as the positive mood changes after a neuraltherapeutic injection.

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### ***Neural therapy on acupoints - Why, when and how to do***

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One option of neural-therapeutical implementation is the injection on or in acupoints.

Renowned in case of pathology these points are conspicuous in different aspects, as related to palpation, electrophysiological qualities or others.

In the usage of acupuncture among others the sensation of the needle and the techniques of stimulation are responsible for the therapeutic effect, in Neural Therapy there is an additional pharmaceutical force by the local anaesthetic.

The selection of acupoints in a concept of treatment can take place by different diagnostic criteria. In addition to a pure meridian-applied method the diagnostic methods of TCM, for example related to the eight diagnostic guidelines (Ba Gang), allow further options. In the course of this the occurrence of "Excess" and "Deficiency" plays one of the most important roles, as related to acupoints, an aspect determining a "reinforcing" or "reducing" method of manipulation.

The pharmaceutical effects of local anaesthetics with its biophysiological,

biochemical or electrophysiological changes shall be undoubtedly deemed to be a pronounced "Calm Down", consequently a strong "reducing" form of treatment.

**Conclusion:** According to this the Neural Therapy with the application of local anaesthetics on acupoints would only be useful in cases with "excess" as well in the organs with their according or relevant points as in the meridians, whereas on points with a "deficiency" there won't be any effect.

This postulate, approved by a long year implementation of Neural Therapy and acupuncture including TCM in the daily practical work, should be explained in this presentation and illustrated on familiar TCM-patterns, for example on common pathologies of the liver.

Like this you can be sure to succeed for example on the acupoints Liver 2 or 3 in adequate diseases or patterns maybe with only one injection.

Additional important points or categories of points with their relevant indications as well as the practical application will be specified.

**Keywords:** Neural Therapy, Injection-acupuncture, Local anaesthetics, TCM

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### ***Quick and efficient steps in neural therapy***

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Neural Therapy is a treatment of pain or functional disorders by injecting small doses of local anaesthetics in a specific way. Being a form of regulation therapy, the aim of neural therapeutic treatment is to normalise or improve the body's self-regulation at various levels.

In actual practice the combination of various injection techniques is typical. The neural therapist will adapt his approach to his range of experience and training. The effect of the therapy will depend less on the type of technique

than on an exact examination and the correct inferred biocybernetic idea of the disorder. Also simple techniques prove to be effective if the hypothetical considerations correlate to reality.

Beneath topical injection, segmental therapy, techniques applied to structures of the musculoskeletal system, intravenous application and neural therapeutic techniques for nerve trunks and ganglia, the treatment of "disturbance fields" is the real domain of Neural Therapy.

Each scar is a potential "disturbance field".

Beside residual inflammations, all sorts of scars are also present weak spots. These burden the regulation mechanism of the body by constant irritation. In this connection, we are speaking of "disturbance fields".

The typical "disturbance field" causes hardly any complaints and is, therefore, rarely noticed because the impulses of the disorder are only latent to borderline.

A "disturbance field" has influence on its surrounding area or on other regions of the body by causing disturbance to the biophysical, biochemical and bioelectrical information of the "basic system" (Basic System according to Pischinger).

For the body these "disturbance fields" always mean an increased output of energy as well as loss of economy. In this situation, even a minor additional stress means that functional disorders or pain can be triggered off in other regions of the body.

The temporary inactivation of these causative factors by target-specific injections of small volumes of a local anaesthetic opens the way for the normalisation or improvement of the body's own regulatory process. If it occurs within a second as a result of a neural therapeutic infiltration, the instant disappearance of pain or symptoms is known as "Sekundenphänomen" (Huneke's instant phenomenon).

**The main columns of the diagnostic procedure are:**

History Taking, Inspection, Palpation and Functional Examination

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## History taking

The quality of the diagnosis of disorders depends to a large extent on targeted and specific history taking. A well detailed history helps to minimize the number of tedious and expensive diagnostic tests required. The first impression (gait pattern, posture, etc) and the complaints primarily stated (reason for contact) determine the way in which the experienced therapist directs the exploration.

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### *Gender features of pain syndromes in dorsopathies*

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Pain syndrome is one of the most common phenomena in most human diseases. Features of the emotional experience and tolerance of pain are influenced by various factors: gender, age, family history, marital status, ethnic features and many others. In the present study, gender differences in pain perception is demonstrated as new approach to this phenomenon.

89 patients with vertebral lumbosacral radiculopathy (mean age 46,18 ±9,11) were examined. Patients were divided into 2 groups by gender. Pain syndrome of all patients was assessed at 1, 10, 21 day according to a VAS (visual analogue scale), pressure pain measurement, and from laboratory tests on the number of neurotransmitters.

It is revealed, that women endure a pain worse not only at use of questionnaire methods of research, but also at carrying out pressure pain measurement, especially at night.

Data of blood tests show increased parameters B-endorfin, serotonin, dopamin pains correlating with a level ( $p < 0,05$ ) and decrease in their quantity

at reduction of expressiveness of the pain.

All patients were treated with acupuncture and manual therapy. Significant improvement was revealed in 57 (64%) patients, improvement - in 24(27%), a slight improvement - in 8 (9%), deterioration were not observed.

**Keywords:** a gender, a pain, a low back pain, neurotransmitters.

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### *Complex therapy for the treatment of ovarian cysts*

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**Purpose:** The ancient practice of the Chinese medicine has proven effective for female diseases. Along with recent achievements of the Western medicine we would like to recommend complex therapy based on the TCM for the treatment of such common pathology as ovarian cysts. The purpose of our research is to show that applying complex therapy based on the TCM for treating ovarian cysts is both effective and safe.

**Relevance:** Due to their increasing prevalence, ovarian cysts are at the centre of many specialists' attention, both in the West and the East. The problem is becoming more and more urgent. The amount of research shows the importance attached to the prevention and treatment of this widely spread pathology. As far as we can see, there is a need for research into the treatment of ovarian cysts from the point of view of the integrative medicine.

**Participants:** The research has been conducted on the basis the Centre for Chinese Medicine "Sin-Ya-Chju", Moscow, Russia.

**Methods:** We apply complex therapy inspired by the modern integrative medicine. We combine different methods such as classic and auricular acupuncture, moxibustion and the su jok therapy to enhance the effect of

the treatment. The aim of this complex therapy is to improve the general clinical picture of the patient's condition, to target infections, to reduce inflammation, to move the blood circulation and energy to the affected area, to regulate menstrual cycle, to restore the function of the ovary and the thyroid, to normalize the vegetative nervous system and hormonal status.

**Analysis:** In this research all the patients had relevant tests and examinations and were diagnosed with a non-malignant ovarian cyst before the treatment. During and after the treatment all the patients had regular check-ups with a gynecologist. We kept regular records of the patients' hormone levels. All the patients had ultrasound scans before and after the treatment.

**Results:** Our results are encouraging for the use of this complex therapy for treating ovarian cysts. We are going to present some cases of successful treatment which give evidence that our complex therapy may help to recover the normal functioning of the ovary, improve the patient's condition and has no side effects. Repeated ultrasound examinations confirm positive changes.

**Conclusions:** We can come to the conclusion that this complex therapy is a welcome addition to the treatment of ovarian cysts. It is an organ-friendly approach which may help to avoid surgery and normalize the function of the ovary.

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### ***Acupuncture protocol of chronic cervical syndrome***

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<sup>2</sup> Private Neurologist, Greece`

**Introduction:** Cervical syndrome limits activity and it is one of the most frequent reasons for physician visits. It is represented by a group of symptoms mainly localized in the neck region, but can also be present in other regions.

Acupuncture has been used as treatment for chronic cervical pain, based on studies that have validated it as a reliable method of pain relief.

**Aim:** The purpose of this study was to evaluate the efficiency of Traditional Chinese Medicine (TCM) Acupuncture Protocol on the treatment of chronic cervical syndrome. Patients were treated at P.M.R. department of G.Gennimatas Hospital during 2009- 2010.

**Methods:** TCM Protocol was applied to 17 patients suffering from chronic cervical syndrome. Mean age was 52±16,5 years and the duration of the symptoms was 6±3 months. All participants went through laboratory tests in order to be excluded from other disease. Acupuncture protocol (Traditional Acupuncture Points and Auricular Points) were applied from a P.M.R. physician. To each patient therapy was given twice a week and the duration was 10 -12 sessions.

**Results:** Findings estimated from a Visual Analogue Scale (VAS) and a Neck Disability Index (NDI) questionnaire, using the t-test. SPSS was used for the statistical analysis and measurements were taken at the baseline, end of treatment and three months after. Effectiveness of treatment had shown statistically important benefits of the acupuncture protocol (p<0.05). The improvement also remained at the 3 month evaluation stage.

**Conclusion:** Acupuncture applied from the specialist reduced cervical pain and produced a statistically improved effect. Effects of acupuncture had remained beneficial at least for a 3 month period.

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### ***The contribution of acupuncture and nutritional rehabilitation in herpes zoster***

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**Purpose:** The study of patients with herpes zoster and postherpetic neuralgia. Their treatment with acupuncture compared to the combined treatment of acupuncture and nutritional rehabilitation by food intolerance test called "Prodiel".

**Relevance:** The success of the combination of two methods was realized by the cure of many patients.

**Participants:** Two hundred and twenty-five patients where participated within a period of one year and they were in common monitoring by the acupuncturist doctor and the nutritional rehabilitation doctor by using the food intolerance test called "Prodiel".

**Methods:** The classic acupuncture, applied by the acupuncturist doctor and the cytotoxic test "Prodiel", applied by a specially trained doctor.

**Analysis:** Herpes zoster and postherpetic neuralgia, treated by acupuncture and nutritional rehabilitation.

Postherpetic neuralgia is a complication that continues even after the disappearance of exanthem.

The pain might last for years. This complication is more frequent in elderlies.

Herpes zoster pain is developed by the inflammation of aesthetic nervous endings.

Patients with herpes zoster reveal contralateral symptoms in the dermatome of spinal ganglion that it has been infected.

Acupuncture Mechanisms of Action

Using acupuncture has the possibility:

- to affect the production of analgesic and tranquilizer substances from the organism.
- to increase the local perfusion of the area.
- to affect the production of cortisone this results in the absorption of the inflammation.
- to stimulate the immune system.

Choosing the right points the action of acupuncture is directed to the suffering area.

Mechanism of action of nutritional rehabilitation by cytotoxic test Prodiel.

This phenomenon is called food intolerance (it is also known as "concealed allergic reaction") and it's the subject of many studies in modern medicine. According to the latest researches of the British Allergy Foundation, 40-50% of worldwide population suffers from food intolerance.

**Results:** Acupuncture has cured 14% of the patients with strong pains of postherpetic neuralgia, though the combination of acupuncture and nutritional rehabilitation has cured 24%. Respectively, the percentages for moderate pain were 27% and 43% and for minimum pain were 33% and 58%.

**Conclusions:** The combination of food intolerance test and acupuncture, contribute to the greater success of the analgesia of herpes zoster and postherpetic neuralgia.

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### ***The influence of a repeated acupuncture treatment on intraocular pressure and the compliance of patients with primary open-angle glaucoma – First results of long term prospective follow-up study***

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**Relevance:** Primary open-angle glaucoma (POAG), the most common form of glaucoma is a multi-factorial disease of the optic nerve characterized by the

progressive loss of retinal ganglion cells (RGC) accompanied by preceding visual field defects. Intraocular pressure (IOP) is the most important and most treatable risk factor. Even today glaucoma is one of the most frequent reasons for preventable blindness in the world.

**Purpose:** The intention was to examine the influence of a repeated acupuncture treatment on intraocular pressure and the compliance in POAG patients with unequalled individual target IOP.

**Participants:** 34 patients were examined, whose IOP increased by 30% 18 months after acupuncture treatment compared to final level after preceded acupuncture therapy. In these glaucoma patients we neither found micro morphological changes of the disc nor functional perimetric changes.

**Methods:** Before starting therapy, corneal thickness was determined by 4Optics-Pachymeter. Before and after acupuncture treatment, an ophthalmologic determination of visual acuity and a computer-aided visual field analysis were done. The IOP was measured before, immediately after and 30 minutes after therapy. For documenting the changes in the compliance of the patients we evaluated a standardized questionnaire completed by each patient having undergone this treatment.

**Analysis:** Statistical analysis was realized by the Institute for Biostatistics and Informatics in Medicine and Ageing Research of Rostock University, Germany.

**Results:** Even a repeated acupuncture treatment is suitable to lower IOP in a significant way for a longer term. Therefore acupuncture is able to reduce the progression of glaucomatous visual field defects. Having evaluated the standardized questionnaires we are able to confirm that the compliance with patients increased according to self-application of topical ocular hypotensive medication and life complacency in general.

**Conclusions:** Acupuncture is an appropriate method to treat patients with POAG in addition to lowering intraocular pressure by anti-glaucomatous pharmacological therapy, especially if target IOP is not reached. This way acupuncture treatment is proficient to reduce the frequency of application of topical medication to minimize side effects, costs and to improve compliance

but without delaying ophthalmic surgery if necessary. Repeated acupuncture treatment may decrease IOP effectively and reliably into individual therapeutic range.

The study has not been supported by grant.

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### ***Benefit of acupuncture as treatment of male sexual dysfunction***

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Sexuality is a complex process and behavior; it is coordinated not only by various systems of our bodies such as endocrine, nervous, vascular and psychogenic, and any disturbance in any of these areas can potentially lead to sexual dysfunction.

Couple with increase aging and menopause or andropause prevalence of sexual dysfunction male and female. Acupuncture which proven endocrinal and neurological effect can be use to sexual dysfunction. In a research study, investigation the potentially curative effect of acupuncture to geriatric group in acupuncture research laboratory Surabaya for 40 male responden (50-70 year old) with erectile dysfunction.

Acupuncture stimulation for ten times and three times per weeks.

The effect are:

10 respondents increased blood testosteron and improved erections

13 respondents decreased blood testosteron but improved erections

7 respondents decreased blood testosteron and no improved erections

6 respondents increased blood testosteron but no improved erections

4 respondents no increased blood testosteron and no improved erections

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The result of the research (57,5 %) a satisfactory response improvement of erection and 32,5 % may be neural effect to erectile dysfunction.

Acupuncture is complementary treatment to male sexual dysfunction and other studies demonstrated beneficial effect of acupuncture in patient with erectile dysfunction.

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***The role acupuncture to support osteoporotic treatment of the spine***

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Many following report show the effect of acupoint on osteoporotic, increase bone mineral density and increasing serum estradiol. The theory of acupuncture, increasing pituitary gland, adrenal cortex and medulla system and to sexual glands, the fact based on the research about increased level of estrogen, inhibited bone resorbtion and promoted of bone formation. The survey literature acupuncture can be used the treatment of osteoporosis and the result is three points Zusanli (ST 36), Sanyinjiao (SP 6), and Taixi (KI 3). Research study in subject 20 woman menopausal volunteer (45-55 years) conducted the study before and after statistical methods, after 2 months acupuncture stimulation retained needles 30 minutes twice a week and measurement by DEXA (Dual X-Ray Absorption metry) in lumbar area, BMD increased 16 subject significant increase, 3 subject no significant increase and 1 subjects significant decrease. Acupuncture treatment result increased bone formation in menopausal women and balancing bone formation and improving bone health. Keywords: Acupuncture – Osteoporotic – Spine

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***A medical acupuncture approach to post-concussion syndrome/mild traumatic brain injury***

**G. Chernish**

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**Purpose:** To describe a medical acupuncture approach to the clinical conundrum of post-concussion syndrome

**Relevance:** Post-concussion syndrome presents a therapeutic challenge to both acupuncture and medical interventions

**Participants:** Gregory Chernish, M.D.

**Methods:** An biopsychosocialspiritual approach with acupuncture as a mainstay of treatment is described, based on the author's clinical experience with dozens of cases over the last 20 years.

**Analysis:** Clinical criteria for medical investigation and use of prescription medications is described. Needling of specific acupuncture points is reviewed in relation to their function in treating: 1) sympathetic overdrive 2) vascular irritability 3) mood and cognitive disturbance 4) common extra-cranial pain generators.

**Results:** Case examples are presented. A therapeutic flowchart template is presented.

**Conclusion:** A medical acupuncture approach is superior to medications or acupuncture alone.

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**Acupuncture needling and the neural correlates using fMRI**

**S. Harres**

President of FILASMA

Recent studies have demonstrated the effects of needling on cerebral changes by positron emission tomography (PET) technique. One of them revealed a marked difference in brain metabolic with enhances glucose metabolism changes between true and sham needling

Other one Demonstrate the regionally specific, quantifiable acupuncture effects on relevant structures of the human brain. These preliminary results suggest that acupuncture needle manipulation modulates the activity of the limbic system and subcortical structures.

The activation in the periaqueductal gray was significantly increased and was predictive of changes in perceived pain intensity, showing that periaqueductal gray is a site for higher cortical control of pain modulation in humans.

The consideration of the needling sensation of deqi by most acupuncturists is an important component of acupuncture, yet neuroimaging research that investigates this needle sensation has been limited. Differences were demonstrated in the pattern of activations and deactivations between groupings of scans associated with deqi versus pain sensations in the limbic/sub-cortical structures and the cerebellum regions of interest.

Electroacupuncture (EA) is currently one of the most popular acupuncture modalities. A relatively new analysis method, functional connectivity fMRI (fcMRI), has great potential for studying continuous treatment modalities such as EA and can significantly reduce Periaqueductal Gray (PAG) activity when subsequently evoked by experimental pain. The changes of intrinsic functional connectivity among key brain regions in the pain matrix and default mode network during genuine EA, compared with sham EA, in brain regions play a role in modulating pain perception. We can speculate that continuous genuine EA stimulation can modify the coupling of spontaneous activity in brain regions.

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**A comparative study on thermal characteristics by the strength of laser stimuli in tissue models**

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**Purpose:** The purpose of this study is to investigate the change of temperature by the strength of laser stimuli in tissue models.

**Methods:** This laser device is composed of a 180 seconds' laser investigation section and a 120 seconds' pause section. In the 180 seconds' laser investigation section, the laser was continuously used for investigation for 40 seconds, and for the remaining 140 seconds, the investigation was carried out with the laser turned on and off repeatedly (A: 7.5 seconds of On-Time, Off-Time and 2.5 seconds of Off-Time, B: 8.5 seconds of On-Time and, 1.5 seconds of Off-Time, C: 9.5 seconds of On-Time and 0.5 seconds of Off-Time)

We made a device that could measure temperature of deep under the surface of tissue model using thermocouples. We measures time-varying temperature at the depth of 2, 4, 6, 8, 10, 12, 14 [?] inside tissue model. We calculated peak temperature([?]), the effective time(seconds) and sum of the effective temperature([?]).

**Analysis:** The data were analysed with student t-test and one-way ANOVA with Bonferroni (p<0.05).

**Results:**

1. When the change of temperature was investigated by the strength of stimuli in the depth of 2mm, it was found that A showed  $8.20 \pm 3.55$  [?], B  $9.28 \pm 4.10$  [?] and C  $10.66 \pm 4.68$  [?].
2. All the 3 kinds of stimulus methods showed valid changes of temperature till the depth of 4mm.
3. Although the stimulus was repeated, the change of temperature was found to be still around 2-5 [?], which indicates there was no rapid increase of temperature found by the repetition of stimuli.

4. All the 3 kinds of methods were found to reach the valid temperature within 10 seconds.

**Conclusions:** The proposed system showed that it is effective and safety in transferring heat effect. So, it shows the possibility of usefulness stimulation system.

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### ***Near-infrared spectroscopy for objectifying cerebral effects of laserneedle acupuncture in term an preterm infants***

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Austria

**Purpose - Relevance:** Because of its painlessness laseracupuncture becomes more and more a relevant alternative to needle acupuncture in infants. There is evidence that acupuncture at different acupuncture points e.g. LI 4 (Hegu) induces specific patterns of brain activity described in adults and children. Functional magnetic resonance experiments are based on the indirect representation of neuronal activity and the resulting metabolic changes, particularly the relative changes in concentration of deoxygenated hemoglobin. Another new research method to investigate the oxygenation of the brain is the near-infrared spectroscopy (NIRS). With NIRS a continuous and non-invasive measurement of cerebral oxygen saturation is possible. Especially in preterm infants thus measurement of cerebral effects of laseracupuncture is possible.

**Participants:** Included were preterm and term infants, admitted to the Neonatal Intensive Care Unit (NICU) of the University Hospital of Graz assigned to the sleep laboratory. The university ethics committee endorsed the study protocol and the parents of each patient gave written informed consent. All measurements were done during undisturbed day time sleep.

**Methods - Analysis:** All infants underwent polygraphic recording during

sleep, including heart rate, oxygen saturation, chest and abdominal breathing effort, measurement of nasal flow and endtidal pCO<sub>2</sub>, and NIRS.

For NIRS measurements the NIRO 300 (Hamamatsu, Japan) was used. Measurement of Tissue Oxygenation Index (TOI) is done with the Spatial Resolved Spectroscopy (SRS) method, in which the absorption coefficient of tissue is determined from the regionally dependent weakening of light. A detector especially developed for the SRS method registers the emitted near-infrared light from light source into tissue and allows calculation of TOI with the SRS algorithm. Furthermore, changes of oxyhemoglobin ( $\Delta\text{O}_2\text{Hb}$ ), and deoxyhemoglobin ( $\Delta\text{HHb}$ ) were measured.

For laseracupuncture a laserneedle© (wavelength of 680 nm, 10 mW ; Laserneedle EG GmbH, Germany) was used.

**Protocol:** Before start of polysomnography the laserneedles were fixed. As acupuncture point LI 4 (=Hegu) on both hands was selected. The skin at the acupoint was cleaned and the laserneedles were fixed to the skin with a special adhesive tape. During quiet sleep the laserneedles were stimulated, the stimulation time was 5 minutes in all infants.

**Results:** The study group encompassed 20 neonates from 26+6 weeks of gestation to neonates of 40+6 weeks of gestation, and with a birth weight of 690–3,680 g. Measurements took place on the 22 (11-68) day of life.

During laseracupuncture there were no significant changes of heart rate or oxygen arterial saturation. There was a significant increase in regional cerebral oxygen saturation (TOI) in the last 30 seconds of the stimulation period,

**Conclusion:** During a laserneedle acupuncture there was a significant increase in regional cerebral oxygen saturation in preterm and term infants. This was in contrast to arterial oxygen saturation and heart rate, where no changes could be observed. Therefore, the increase in regional oxygen saturation may be due to changes in cerebral perfusion.

Further studies are needed to quantify the effect of laseracupuncture in newborn infants.

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**Laser acupuncture in children and adolescents with asthma**

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**Objectives:** We want to assess the efficacy and safety of laser acupuncture in children and adolescents with intermittent to persistent-mild asthma.

**Relevance:** Asthma is a debilitating respiratory disease and a major public health problem in the world. Acupuncture has been used in the treatment of airway diseases, including bronchial asthma, for several centuries. Therefore, meta-analyses found only poor evidence for efficacy of acupuncture in the treatment of bronchial asthma. Laser acupuncture, a painless technique, is commonly practiced in the treatment of pediatric patients.

**Participants:** Five patients who satisfied all the inclusion and exclusion criteria received 12 treatments of laser acupuncture once weekly.

**Method:** Patients was followed for 4 weeks to see if there is any rebound in asthma symptoms. The points chosen for laser acupuncture weekly consisted of Chize (Lu-5), Lieque (Lu-7), Taixi (KI-3), Zusanli (ST-36). The efficacy endpoint will be the weekly peak flow variability (PFV), Heart rate variability (HRV), asthma control test (ACT) and Methacholine challenge test.

**Analysis:** Paired sample t-test

**Results:** Weekly peak flow variability (PFV) were significantly decreased from 16.8±3.6 to 8.8±4.0 % (p <0.05). The Heart rate variability (HRV) were significantly

decreased from 68.2±9.2 to 57.4±8.7 ms (p <0.05). The score of asthma control test were increased from 16.5±4.5 to 18.5±4.4 points (p >0.05). Methacholine challenge test were increased from 2.2±1.5 to 5.4±6.1 mg/dl (p >0.05).

**Conclusions:** We observed better results of weekly peak flow variability (PFV), Heart rate variability (HRV). Thus, laser acupuncture may be an effective treatment for intermittent to persistent-mild asthma.

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**Meridian visualization by infrared light**

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**Purpose:** Acupuncture and moxibustion treatments have been executed based on the existence of acupoints and meridian system of the human. Exploration of the existence is essential, and has several paths that have been taken successfully. One showed that stimulation with infrared light from moxa cigars was a possible tool to visualize the meridian <sup>[1]</sup>. The other had a different opinion based on their experiments by using two types of infrared cameras <sup>[2]</sup>. The debate seems to be important on the aspects of the existence of meridian system as well as the understanding of acupuncture modality.

The purpose of this study was to provide more empirical date to elucidate the previous debate of the possibility of stimulation-induced meridian-like structures.

**Methodology and Analysis:** Three healthy volunteers (male, 20-22 yrs) participated in the study. One infrared camera (Eosystem, South Korea) was employed as an imaging tool. The measurement procedure is as following. First, a subject lay down a bed while his legs were exposed. Second, a big paper board was placed between his legs. Third, an acupuncture practitioner executed moxa treatment at the near of ST36 in such a way that the board completely kept the IR from radiating to the ST36. at the opposite leg. Fourth,

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the IR camera was placed at the middle of the legs and IR images were taken during IR stimulation. Identical measurement was done after the board was removed. Similar images were obtained by stimulating the opposite ST36 with a moxa cigar.

IR images from the experiments were visually compared to find any change among the images. Sometimes, pixel by pixel comparisons were made to differentiate ambiguous images. No statistical analysis was done.

**Results:** The leg near a moxa cigar showed an IR pattern that seems to suggest the existence of a meridian path. This trend is regardless of the presence of the board. However, the leg far from the moxa cigar revealed different results. In the presence of the board, the image of the leg showed no indication of the moxa stimulation. In the absence of the board, there was meaningful image change induced by the moxa stimulation although its intensity was smaller than that from the leg near the moxa cigar. The patterns of the meridian path varied with a relative angle between the camera and the cigar. They also changed with the location of the cigar while the camera was fixed.

**Conclusions:** In this study, the meridian visualization on the one leg while applying a moxa cigar to the other leg was tested. We found that the visualization of a meridian at the leg by stimulating ST36 at the opposite leg seems to be mainly caused by direct radiation from a moxa cigar or by IR reflectance from the opposite leg. However, the meridian visualization at the leg near a moxa cigar is not clearly solved and further studies are necessary to clarify this issue.

**Acknowledgements:**

This work was supported by Basic Science Research Program Through the National Research Foundation (NRF) funded by the Ministry of Education, Science and Technology (R11-2005-014).

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**Low level IR-laser acupuncture and therapy - The high regulatory treatment**

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**Introduction:** Laser is a powerful stimulation in living open biological systems. Biophotons have importance for regulation and intercellular communication. Laser light influences the cellular and whole regulation system and disposition of energy stimulating Mitochondrions. When Laser energy is absorbed as well as information to living cells and tissues, the applied energy is transformed to biochemical reactions and for removing of regulative disturbances. Acupuncture's energetic conductive pathways seem to be primarily suitable for selective conduction of frequencies. Photons in Infrared spectrum function as carrier waves for intercellular communication and exchange of information transfer into cell layers in needle as well as Laser-Acupuncture. DNA is essentially decisive for optic resonance with emission of coherent waves. The connective tissue and the interstitial body fluids function as essential receptive, conductive and active medium. The absorption of Laser energy and respective information in cells and tissues provides transformation to biological reactions used for removing of regulatory disorders. Longtime experiences to valuable clinical effects: stimulation of neurohumoral secretion, pain relieving by desensitization of peripheral nociceptora, increasing pain threshold, fortification of defensive force, antibacterial, virucidal, antiinflammatory, antiedematous, relaxant effect and accelerated improvement of healing processes.

**Objective:** The biological effect of cell membran stabilisation resulting in many different effects as the meaningful inhibition the effects of biological mediators, increasing threshold for pain, antiinflammatory and antiedematous reaction. Very important: increase of resistance and adaptability of the immune system

by blood and lymphatic system stimulation- further frequent immediate pain relief, increased lymph drainage, accelerated healing of injuries. Especially important is the antibacterial and antiviral effect. Acupuncture's energetic conductive pathways seem to be primarily suitable for selective con-duction of frequencies. Photons in infrared spectrum function as carrier waves for intercellular com-munication and exchange of information transfer into cell layers in needle as well as Laser-Puncture.

**Methodology:** The peculiarity of the clinical Laser efficacy is the pain relieving effect by desensitization of peripheral pain receptors- one of the best help in Algesiology. Defined IR-Laser Nogier-frequencies have principle effects and are appointed to pathological situations such as antiinflammatory or nutritive effect. The irradiation can be applied on Acupuncture Points or on affected areas. The duration of application is very short: mostly 1-2 joules during 30-60 seconds, higher dosage treating strong inflammation and chronic degenerative, painful conditions

New research, new therapeutic and effective hit: the non invasive Weber-Laser needle method. Results: 70-75% quicker wound healing, relief of muscular pain and tension, significant influence on Neuralgic diseases, pain relieving by desensitization of peripheral receptors, increasing pain threshold

**Conclusion:** Pulsating Laser beams have a perceptive quality of the system of Qi-channels (Meridians) and are therefore suitable to provide resonance relation to Qi-Channels and their points.

Indispensable progress component in holistic therapy. Clearly perceptible effects with often rapid improvement of flexibility, pain-relieving, no-side-effects if applied correctly, use for acute and chronic derailments and excellent non invasive stimulation in pediatrics. Compatibility with other methods.

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### ***Laserneedle acupuncture in daily practice***

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The newest innovation, there's for acupuncture stimulation is laserneedle. There's the machine produces the laser light and the output become 10 channels in red light beam.

In laserneedle device there's so many frequencies in that.

Emission with Continuous wave's sign green and the dosis is in mW. In daily practice we use the continuous to reduce inflammation, increase activation of fibroblast, lymphatic drainage. Emission with frequencies sign in yellow, the dosis is in Hz, appear in pulsed red light. The most is reinegger and tons. Reinegger is device to meridians which is 12 meridians inside.

Patient in chronic pain, there's must be energy imbalance, mostly is deficiency and only laser can do and must be treat with continuous emission. For chronic pain we can use tons emission, for pain killer use S1 Beta endorphin 2 Hz. and S2 Beta endorphine+dynorphin 8,5 Hz.

As degeneration of fibrous tissue only laser can stimulate the tissue to recover. Eg. In fibromyalgia, degenerative disc of lumbal or cervical problem, arthrosis of knee region. Degeneration process as we know from chinese medical theory is always cause by deficiency energy from the organs.

Many children disease like asthma bronchial, chronic rhinitis it because of deficiency of kidney energy, now adays there's so many virus infection because kidney deficiency, spleen-stomach energy deficiency. And can be treated only by accupoint stimulation by laseracupuncture treatment.

10 patients with fibromyalgia can reduce pain with 2 Hz stimulation on Hegu (LI 4), Neiguan (PC 6) points bilateral and for the local points can use 8, 5 Hz.

5 patients with pre-menopause syndrome can treat by 2 Hz at Neiguan (PC 6), Hegu for treat sleep disturbance. The laser put at Zusanli (ST 36), Sanyinciao

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(SP6) with continuous wave to treat hormonal imbalance.

30 patients with asma bronchial and chronic rhinitis the laser can put at Hegu (LI 4), Feishu (BL 13), and Zusanli (ST 36).

5 patients with atopic dermatitis can treat by anti allergy on Hegu (LI 4), Zusanli (ST36) points.

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### ***Segmental treatment in pain syndromes in auriculotherapy: Clinical significance of the border of the helix***

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**Background:** P.Nogier established a vertebral cartography with cervical vertebrae down the anthelix and sacral vertebrae up the anthelix (backbone of "inversed embryo"). He also introduced the notion of harmonic projections, on the helical border, of these segmental references with the Zero point as pivot. The harmonic projections of the sacral vertebrae were very difficult to establish however. Dr.Ries (Germany) reported treatment of lumbar polyradiculopathy on the superior border of the helix. René Bourdiol suggested an anteroposterior polarization of the ear pavillion.

**Aim:** The aim is to explore activity on the entire helical border, from its tail (cauda helix) to its root (radix helix).

**Results:** There is elective tenderness on pressure along the entire border of the helix. C1 is situated at the beginning of the tail, whilst S5 is situated at the Zero point. We confirm the harmonic projections as reported by Paul Nogier. The harmonic projection of D12-L1 on the helix corresponds to the innervation level of the symphysis. We confirm the anteroposterior polarisation of the helical border with sensory significance on the anterior border and motor significance on the posterior border as reported by René Bourdiol. We add however a vascular

significance of the cornice of the helix along its entire length. We propose that it would represent the orthosympathetic innervation of the concerned segmental vascularisation. We could clearly situate the polyradicular localisations, as reported by Dr.Ries, fitting within the segmental progression along the helical border. The segmental innervation of the foot on the helix, corresponds to representation of the foot on the scaphoid fossa as indicated by Nogier. The segmental innervation of the pelvic viscera on the helical segment (on the level of the temporal adhesion) corresponds to the concerned viscera as represented on the superior concha by Nogier. We could give the sacral references their right place on the root section and section of the temporal adhesion. On the lateral side of the Zero point is situated the coccygeal-S5 level (coccygodynia). The Zero point represents the anal canal, but only the part external to the linea pectinea. Elective sensitivity at the cornice on the level of Zero point, represents the vascularisation (external hemorrhoids). DM1 is situated on the lateral side, and RM1 medially to the Zero point. We suggest somatic acupuncture could be supplanted by treatment of these peri-Zero points when they would show tenderness on local pressure.<sup>(1)</sup>

**Conclusion:** The helical border is active in segmental pathology along its entire length. There is a clear progression of the segmental levels of cervical-, dorsal-, lumbar-, sacral- and coccygeal levels. The harmonic projections of Nogier contain a sensory point on its anterior surface, a motor point on its posterior border and a vascular point in its cornice, corresponding to the same level of segmental innervation. This concurs with the anteroposterior polarization of R.Bourdiol. The treatment of segmental pain is possible with treatment of the corresponding tender spots on the helical border.

(1) J.P.J.Fossion; Activity of the helix in ear acupuncture; DZA, 53, 4/2010.

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**Auricular acupuncture and integrated therapy of obesity**

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All the guide-lines about the treatment of the excess of weight, published up to now, agree in asserting that a correct approach to this pathology cannot leave aside a reduction of the calories takings and an increasing of the physical activity. Both these aims are difficult to reach, and it is even more difficult modifying in a definite way the patient's behaviour in relation to both feeding and sedentariety. The majority of authors agree in believing that in case an ipocaloric diet is prescribed, it is anyway fundamental to associate such a prescription with other therapeutic strategies (eating education, physical activity, elements of cognitive-behavioural therapy, incidental pharmacological treatment) which increase its effectiveness.<sup>(2)</sup>

Our study group has put right the DIMANAT method which envisages the use of auricular micro-system stimulation in the treatment of obesity, the results of which, were already presented in 1997.<sup>(4)</sup>

The first aim we had,was to understand which aspects of the eating behaviour could be influenced by the stimulation of the auricular micro-system and at the same time to individuate in the mare magnum of the auricular points suggested by the numerous authors, the most efficacious ones in order, then, to codify them in consideration of the action type.

A remarkable support in setting up the method, has been provided by the studies on animals which have looked into underlying neurobiological mechanisms, particularly the action on hunger sensation and saxiety. It starts from the pioneristic works by Asamoto<sup>(5)</sup> and Shiraishi<sup>(6)</sup> up to the most recent works of the Korean Kim on auricular stimulation and ipotalamic expression of the NeuropeptideY (NPY).<sup>(7)</sup>

Auricular Acupuncture and integrated treatment of obese patients

The data obtained from an ultra-decennial clinic experience on more than

1300 patients treated with auricular acupuncture, allow to assert that there is some evidence that this therapy can increase the compliance to the dietic restriction in the different stages of the combined diet-therapic behavioural treatment and physical activity. Extremely positive results in terms of keeping the loss of weight obtained for some time (>2 years), let foresee that the auricular therapy may have induced the regulation system of the body weight to move to a lower level of weight and energy.

Auricular acupuncture can be used with different purposes, in accordance with the kind or of the different treatment steps and with the presence or not of troubles in eating behaviour.

- A) In the first period from the beginning of the treatment. Aim: improving the acception of the dietic restriction, with a medium loss of weight 2-4 Kg per month, (6-12 in three months time). Patients who have already tried to loose weight without succeeding in it, and/or obese patients with a diagnosis of BED in association to an adequate psycho-educational and psycho-therapeutic cognitive-behavioural intervention (CBT).
- B) In the second stage (from 3 to 6-12 months). Slowing down phase of the weight loss owing to omeostatic mechanisms of the weight maintenance which acts on the energetic methabolism and on the sensation of hunger. Aim: keeping the acceptance to the dietic restriction, cutting off the relapses phenomenon.
- C) At the end of the period of the loss of weight anyway obtained (DINAMAT, only diet prescription, dietic-behavioural, endoscopic, bariatric).

**Aim:** avoiding to regain the weight lost in the short period (6-12 months) and in the long period (12-24 months).

- D) In association with Very Low Calorie Diets (VLCD) in patients affected by BED or with Binge Eating symptoms (not classifiable as patients suffering from BED) in association with an adequate psycho-educational and psychotherapeutic intervention (CBT). Aim: improving the acceptance to the dietic restriction, supporting the weight loss maintenance.

Auricular stimulation and eating behaviour

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- 1) Remodulating hunger and satiety sensation
  - 2) Operating on psychological and psycho-pathological aspects of eating behaviour by:
    - a) Optimization of the reply to stress
    - b) Psycho-regulatic action <sup>(8)</sup>

It follows

- Action of protection from the Psychological Effects of the Dietic Restriction (anxiety, anger/aggressiveness, disturbed control of impulses).
- Action on emotional eating.
- Action on Binge Eating symptoms and Craving episodes.

Auricular points are stimulated by little magnetic spheres, vaccaria seeds or semi-permanent needles let in situ for a period of time from 7 to 15 days.

The choice of the points is guided by an algorithym which is based on a weekly collecting corporeal weight and on the results provided by an original daily evaluation, compiled by the patient, which integrates the food-taking evaluation (food diary) with the evaluation of satiety felt at different day moments. (Visual Analogue Scale VAS).

Still in the same card the psycho-emotional condition is collected (Anxiety, Depression and Agressiveness/Anger) along with the incidental presence of Craving episodes and Binge Eating symptoms.<sup>(9)</sup>

For the psychometric evaluation of the eating behaviour of the obese patient, BES (Binge Eating Scale) Italian version has been employed.

### Clinic experiences

**Introduction:** One of the greatest problems in the obesity and overweight treatment is the maintainance of the weight lost.

The purpose of our work has been to examine the auricular stimulation action combined with a weight auto-maintenance program.

**Methods:** Fifty patients (aged from 20 to 55 42 F and 8 M), who had attained a loss of weight at least 10% of the initial weight (only traditional dietic restriction, traditional dietic restriction+behavioural approach (CBT), dietic restriction VLED (Very-Low-Energy Diet) have been recruited. They

followed for twelve months a weight auto maintainance program according to the rules: 1) Checking the weight once a week 2) Doing physical activity according to the indications of the American Colleges of Sports Medicine (150-200 minutes walking per week-10000 steps) 3) Going on a diet poor in fats, reducing the calories takings and increasing the physical activity in case the weight exceeds two kilos the weight attained by the thinning program. All the patients were given a dietologic counselling by the family doctor who had in charge a patient to be examined every two months.

A) Active group: Weight auto-maintanance program+auricular acupuncture

B) Control group: j the weight auto-maintanance program only.

The primary end-point of the research was the maintainance of the weight lost up to 12/24 months from the end of the initial thinning program.

**Results evaluation:** a) weight collecting in the periods: T0 beginning of the weight maintainance program, three months from the beginning T1, six months from the beginning T2, nine months from the beginning T3, twelve months from the beginning-end of the program T4, twenty four months frm the beginningT5. BES (Binge Eating Scale) administration in the periods: T0, T1, T2, T3, T4,T5.

**Therapy:** The active group has also had a monthly acupuncture session according to the DIMANAT method, by a continued stimulation of the auricular points. In case a weight increasing of more than two kilos occurred, patients were treated with a weekly course of three auricular acupuncture sessions.

**Results:** The number of participants who have kept a loss of weight of at least 5% in T4 was 19 (76%) and 14 (56%) in T5 in the group A; the number was inferior in the group B, 13 (52%) in T4 and 10 (40%) in T5. The number of participants who kept a loss of weight of at least 10% in T4 was 12 (48%) and 9 (36%) in T5 and in the group A 6 (24%) in T4 and 2 (8%) in T5. The Bes scores collected in T0, T1, T2, T3, T4 and in T5 were meaningfully lower in the active group in confirmation of an auricular stimulation action on the psycho-emotional aspects of eating behaviour, already carried out by previous research.

In both groups the weight loss maintenance was greater than the one related in literature on no-intervention, confirming how the guided auto-aid program (no-specialistic medical support) can intervene in a positive way on this important aim. In case the results of the studies about the effectiveness carried on at the moment provide positive outcomes, the auto-aid programs combined with the auricular acupuncture could be a little expensive and potentially useful way in helping patients to lose weight or to keep the loss of weight attained.

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***Leptin, Ghrelin, TNF-α before and after hypo-caloric traditional Chinese medicine and auricular acupuncture***

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**Aim.** This RCT study investigates the function of a hypo-caloric Chinese traditional diet with and without auricular acupuncture on body weight, BMI, waist girth (WG) and control of hunger in obese patients. Moreover it aims to investigate the behaviour of some cytokines, such as leptin and TNF-α, involved in the regulation of appetite and metabolism of fat tissue, as well as the secretion of ghrelin as regulator of the gastric emptying.

**Materials and Methods.** 102 patients were randomized in 2 groups in the period April - May 2006. In group A, initially of 51 subjects, 30 completed the trial: 7 males and 23 females, average age of 48.5±10.68 years, average body weight of 85.39±15.56 kg, average BMI of 31.88±4.96, average WG of 94.37±14.91 cm. The 30 patients of group A have been studied in their basic condition (T0) and 6 weeks after treatment (T1) with a standard traditional Chinese diet of about 900 calories. In group B, initially of 51 subjects, 30 completed the trial: 8 males and 22 females, average age of 49.6±9.95 years, average body weight of 84.18±5.8 kg, average BMI of 31.71±5, average WG of 93.97±14.97 cm. The 30 patients of group B have been studied in their basic condition (T0) and 6 weeks after treatment (T1) with a standard hypo-caloric diet of about 900 calories. In group A, the subgroup A1 (n = 15) was also treated with auricular acupuncture and subgroup A2 (n = 15) with sham auricular acupuncture. Beside the variation of weight, BMI and WG, this work verified also the dietary behaviour before and after treatment by using the questionnaire for hunger measurement. Blood samples were taken in

the morning on an empty stomach to record the contents of leptin, TNF- $\alpha$  and ghrelin, the day before (T0) and the day after (T1) the end of the standardized diet treatment.

## Results

	Group A from T0 to T1	Group B from T0 to T1
BMI	31.88 $\pm$ 4.96 $\rightarrow$ 28.96 $\pm$ 4.54	31.71 $\pm$ 5 $\rightarrow$ 30.57 $\pm$ 5.02
BODY WEIGHT (Kg)	85.39 $\pm$ 15.56 $\rightarrow$ 77.32 $\pm$ 14.67	84.18 $\pm$ 15.08 $\rightarrow$ 81.19 $\pm$ 15.8
WG (cm)	94.37 $\pm$ 14.91 $\rightarrow$ 86.98 $\pm$ 13.50	93.97 $\pm$ 14.97 $\rightarrow$ 91.97 $\pm$ 15.01
Leptin (ng/mL)	37.96 $\pm$ 4.82 $\rightarrow$ 9.32 $\pm$ 2.30	31.03 $\pm$ 5.61 $\rightarrow$ 21.72 $\pm$ 3.68
TNF- $\alpha$ (pg/mL)	7.34 $\pm$ 2.02 $\rightarrow$ 6.08 $\pm$ 1.07	7.14 $\pm$ 2.47 $\rightarrow$ 6.31 $\pm$ 1.56
GHRELIN (pg/MI)	67.02 $\pm$ 5.15 $\rightarrow$ 71.84 $\pm$ 10.25	68.21 $\pm$ 12.75 $\rightarrow$ 69.74 $\pm$ 12.14
SCORE OF QUESTIONNAIRE FOR HUNGER	4.43 $\pm$ 0.56 $\rightarrow$ 1.33 $\pm$ 0.47	4.50 $\pm$ 0.50 $\rightarrow$ 2.06 $\pm$ 0.58

The improved score appears to be definitely prominent in subgroup A1 in comparison with subgroup A2, validating the effectiveness of auricular acupuncture on the appetite of obese people.

**Conclusions.** Our study points out a reduction of leptin in groups A and B in parallel with the reduction of BMI. In particular, leptin is more markedly reduced in group A in comparison with group B. As concerns ghrelin, our data, though non statistically relevant, show a better recovery of the ghrelin secretion in the patients treated with standard Chinese diet, contributing as well to the probable restoration of a normal gastric transit. Finally, the analysis of the behaviour of appetite perception assessed by the questionnaire allowed to highlight a generalized improvement, particularly in the subjects treated with the standard Chinese diet associated to auricular acupuncture.

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### *Acupuncture in tension-type headache in pregnancy*

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**Purpose:** This study was undertaken to test, under real-life conditions, the effects of acupuncture on headaches during pregnancy and compare this with a group of patients undergoing conventional treatment alone.

**Participants:** A total of 43 conventionally treated (lifestyle modifications and stretching) pregnant women were randomly allocated into two groups to be treated, or not, by acupuncture.

**Methods:** They reported the severity of pain and the disability this pain was causing in quotidian aspects of life such as mood, sleep and working using a Numerical Rating Scale (NRS). The main end-point was the mean difference between the first and the last interview after eight weeks of treatment. Secondary end points were the changes over time in the NRS assessments of pain intensity, disabilities in mood, sleep and working and the use of medications.

**Analysis:** Two-sample tests or Kruskal-Wallis tests were used to compare demographic variables. Differences of values between initial and final sessions were analysed by a two-sample test. Changes over time in the NRS assessment wer analysed by the Fisher exact test. Disabilities were analysed by Mood's test for median. A p-value <0.05 indicated difference.

**Results:** All women completed the treatment. No important adverse effects were reported. Significant improvements were found for pain at the end of the trial in the study group, 3.9 vs 1.7 difference in favor to acupuncture group (p<0.05). This group also used less medication and had a greater improvement in their disabilities when compared with the control group.

**Conclusions:** This study suggests acupuncture alleviates tension-type headaches during pregnancy.

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### ***Cosmetic acupuncture***

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Cosmetic Acupuncture is a practice which aims to provide cosmetic benefits for the face as well as improving the general health. Based on Traditional Chinese Medicine (TCM), the procedure aims to reflect the inner energy (Qi) in the healthy body on the face. The process involves determining imbalances in the body through pulse diagnosis method followed by stimulation of the acupuncture points around the face area using the flow of energy from the balanced body. Desired results may not be achieved through Cosmetic Acupuncture without the balanced Qi energy.

The therapy aims to achieve overall anti-aging results as well as eliminating wrinkles, spots and sagging on the face.

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### ***The influence of needling point Cheng Jiang -CV24 in sedating a. the pharyngeal reflex and b. reducing hypersalivation***

#### **A. Tsirigoti**

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It is a fact, that in the everyday practice the dentist has to confront patients particularly stressed, with whom simple dental routine procedures seem very difficult to perform.

This refer to taking a tooth x-ray,taking an impression to make a cast, anesthetizing the soft palate, even to bite on a gauze after an extracion of a molar.

Needling the point Cheng Jiang is of great importance for both the practitioner and the patient.

We have immediate results;the faryngeal reflex and the hypersalivation are reduced and the patientis relaxed.The dental interventions are carried out in the usual routine.

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### ***Non-pharmacological treatment of chronic vertebrobasilar insufficiency***

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The purpose of this study was to explore the possibilities of non-pharmacological therapies (acupuncture and manual therapy) in the complex treatment of patients with chronic vertebrobasilar insufficiency (VBI).

**Material and Methods:** The work was conducted at the Department of reflexology and manual therapy of the Russian Medical Academy of Postgraduate Education, at 44th neurology department of SP Botkin Clinical Hospital. 114 patients with chronic VBI were examined and treated. The average age of patients was  $47 \pm 4,7$  years. The average disease duration  $11 \pm 1,4$  years. Men - 28 men, women - 86. All the patients had a clinical-neurological and instrumental examination.

**Results and Discussion:** The results of manual diagnosis complemented those of clinical examination and revealed neurological vertebral disorders in

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the patients. Functional radiography of the cervical spine showed a marked presence of pathological changes: degenerative and dystrophic. Magnetic resonance imaging revealed herniation of intervertebral discs of one or more levels, stenosis of intervertebral foramen and spinal canal. Ultrasound duplex scanning of the brachiocephalic vessels revealed atherosclerotic lesions of the brachiocephalic vessels, with a decrease in linear velocity of blood flow in the vertebral arteries, tortuosity of vertebral arteries and signs of difficulty of venous outflow.

Positive positional pressure on the cervical spine during the study pointed to the relationship between the presence of degenerative changes of the spine and haemodynamics in the vertebral arteries.

In 84% of the patients, by the results of transcranial Doppler, posterior cerebral arteries had reduced metabolic regulation, reduced linear velocity of blood flow and asymmetry of blood flow in the vertebral arteries

The patients of the main group (82 persons) received complementary treatment, including non-pharmacological methods (reflexology and biodynamic correction). Patients of the control group (32 persons) received conventional medical therapy. Combination of reflexotherapy in complex treatment of chronic vertebrobasilar insufficiency is possible to effectively arrest the pain syndrome due to activation of the basic mechanisms of antinociceptive system. Biodynamic correction in the main group of patients aimed at the elimination of existing and pathobiodynamic and pathobiomechanical violations - optimizing motor stereotype and the eliminating postural disorders.

Analysis of the results of the treatment in the main group showed significant improvement. This improvement applies to 89% of patients according to clinical and neurological examination.

#### **Conclusions:**

1. Neuroimaging research methods and transcranial Doppler revealed a negative correlation between the number of pathobiomechanical changes of the cervical spine and indicators of metabolic regulation of the posterior cerebral

arteries.

2. The use of reflex therapy (acupuncture and manual therapy) in the treatment of chronic vertebrobasilar insufficiency can increase the pain threshold without any medication, and restore functional relationships of bone structures and the ligament-muscular apparatus of the cervical spine, resulting in normalization of cerebral haemodynamics and improve venous outflow.

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### ***Acupuncture for improving chronic sinusitis complicated with headache***

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**Introduction:** Sinusitis is one of the most common medical problems and it can often be complicated with other conditions such as headache. Acupuncture is a traditional treatment method and research has shown that it can be very effective for respiratory diseases, including sinusitis.

**Aim:** The objective of this study was to evaluate the efficiency of acupuncture for treatment of chronic sinusitis (CS), which is complicated with headache. The patients were treated at P.M.R. Department of G. Gennimatas Hospital.

**Patients and Methods:** 12 patients suffering from CS were treated with acupuncture. The duration of sinusitis was over three months and all patients had CS with headache. Traditional Chinese acupuncture protocol was applied from a P.M.R physician who had studied the method. 10-12 sessions were applied to each patient twice a week.

**Results:** The number of days with headache and the visual analogue scale (VAS) score for the symptoms (nasal congestion and facial pain) were used for evaluating the results of the study. Measures were applied at the baseline,

end of treatment and three months after. Statistically important benefits of acupuncture treatment were found in the participants, ( $p < 0.01$ ). The improvement also remained at the 3 month evaluation stage.

**Conclusion:** Acupuncture was effective in the treatment of CS, reducing the number of headache days, nasal congestion and facial pain.

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***The piriformis syndrome: A common polyradicular ischialgia (L5-S1-S2) treatable with auriculotherapy as entrapment pathology within the muscular floor of the basin***

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Piriformis syndrome results from injury or over strain of the piriformis muscle and pelvic inflammatory disease affecting the muscle and leading to entrapment of the sciatic nerve in the greater sciatic notch. Clinically it is commonly encountered with sciatica.

The helical border of the ear is active in segmental pathology along its entire length. There are clear elective tenderness points to be detected according to the segmental levels of cervical-, dorsal-, lumbar-, sacral- and coccygeal levels. The segmental progression were described by the harmonic projections of Nogier. We report these harmonic projections contain a sensory point on its anterior surface, a motor point on its posterior border and a vascular point in its cornice, corresponding to the same level of segmental innervation. This concords also with the anteroposterior polarization reported by R.Bourdiol. The treatment of segmental pain is possible with treatment of the corresponding tender spots on the helical border. We report four tender spots to be detected in case of the piriformis syndrome, useful for auricular therapy.

Also this can be combined (when caused by simple injury to the muscle) with body acupuncture treatment according to TCM syndrome differentiation. Accurate diagnosis and precise selection of acupoints are essential to achieve a successful result.

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***Neuro-acupuncture and rehabilitation medicine***

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**Introduction:** The practice of acupuncture in a Physical Medicine and Rehabilitation (PMR) hospital department in Paris is not common, it is actually very rare. As a matter of fact, only a dozen of PMR specialists practice acupuncture in France.

A pragmatic use of acupuncture, taking in consideration the pathophysiology of pain from a western point view, is not the norm. Yet, this deliberate choice opens up to new prospects where acupuncture needles are viewed as electric mediator. The use of acupuncture for amputation neuroma pain is its best illustration.

The practice of acupuncture in a university hospital is an opportunity to offer this treatment, of chinese origin, for pathologies where western treatments have come to a limit. It is also the opportunity to give to some work areas (neuroma, paraplegia, spasticity), the framework of research by associating it

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the analysis of changes of electric values during acupuncture sessions or the impact of static balance in stabilometry.

The neuro-acupuncture falls, depending on the situations, as a complement or alternative to western chemicals or non chemicals treatments.

We will consider successively myo-fascial pain of muscle considered healthy, spastic or myopathic. Then, we will show a special use of needles for neuropathic pain. Finally, we will point out how acupuncture in amputation neuromas, can reduce or remove the pain that have become resistant to most of powerful analgesics.

### 1. Myo-fascial trigger points

Musculo-skeletal troubles seems to apply to 75 % of the musculoskeletal pain. Trigger points, according to Travell and Simons, are a continuous or remaining contraction of fascicle of muscular fibers. Initially latent, only revealed by a systematic palpation, they become gradually more painful and embarrassing in movements or even at rest. The physical treatment based on a quick stretching, can efficiently be replaced by a puncture of the trigger points. The acupuncture needle inserted into a trigger point release the contraction. Local or referred pain, diminishes or vanishes. The muscles recover their elasticity. Movement can then be accomplished in all the joint amplitude. To find a trigger point, the palpation must be very meticulous: it has to mark out muscular pain from skin and underskin pains. The application of the needles must be joined to a research of *deqi* (得气): this manipulation associates vertical and rotating movement, and allows the “resurgence” in the pain perceived by the patient. The similarity of the pain perceived by the patient, the pain perceived during the palpation and the pain perceived during the search of the *deqi*, guarantees the effectiveness of the gesture. (see note 1)

This therapeutic procedure, simple and common in the sane muscle, can be put in practice for fibromyalgic (Figure 1), spastic or myopathic muscles.

### 2. Neuro-acupuncture and spasticity

Spasticity is a sensori-motor disorganization of central origins, resulting in

an exaggeration of the myopathic reflex. Some spastic muscles are painful on passive mobilization, and therefore difficult to stretch. The restriction of stretching leads to muscular and joint limitation, which prevent any recovery of deliberate motricity and control on functions such as balance and walk for the lower limb, prehension for the the upper limb. Spasticity can be of different kind, weather it occurs in the context of a stroke, an auto-immune inflammatory disease such as Multiple Sclerosis or spinal cord injury.

#### Pain in spastic hemiplegia

Some spastic muscles are sore and palpation reveals indurated fascicles of muscle fibers. The puncture of these fascicles, at its most painful point or at the level of the botulinum toxin injection, leads to two simultaneous phenomena: muscle relaxation and pain decreasing. The main concerned muscles are in the upper limb, pectoralis major, le biceps brachii, brachio radialis, flexor digitorum, flexor pollicis longus ; in the lower limb, hamstrings, tibialis posterior and soleus.

#### Spasticity in Multiple Sclerosis

Multiple Sclerosis is an inflammatory of white matter of brain and spinal cord. Patients suffer of motor, sensitive and cognitive symptoms. There are as many cases as there are patients. Pains and painful spasticity are sometimes a step in the evolution of the disease, punctuated by exacerbation and remission phases. The puncture of these points follows the expression of this spastic pain, and adapts to variations. We were able to establish by stabilometry that on certain patients, treatment by dry needling on painful spastic points, had a positive impact on the quality of balance.

#### Neuro-acupuncture versus botulinum toxin

Botulinum toxin has demonstrated its efficiency in spasticity treatment: injected in a muscle that still has its elasticity qualities preserved, it favorably changes the patient condition for months. Toxin injection has sometimes also an impact on muscles spastic pain (even though it can as well be painful during the process and later during the following days). Acupuncture applied on the trigger point has an almost immediate effect on pain and spastic

contraction. The benefit on pain is variable and can persist for few days to few weeks. The benefit on the elasticity of the muscle is shorter and only lasts for few hours. The indication of acupuncture compared with botulinum toxin for spastic pain is obviously for pain and not for spasticity.

Neuro acupuncture and spastic motor scheme

We have found another aspect of the impact of acupuncture needles: the modification of the spastic motor scheme. Spasticity changes extension into a flexion scheme. Bobath has demonstrated that to help the knee flexion, impossible in the sagittal plane, one had to bring the hips into abduction - flexion at first. A needle in the rectus femoris and one of three needles in the soleus (acupoints 55, 56, 57 of *zu tai yang*), changes immediately the resistance of the muscles and allows a flexion of both knee and ankle in the sagittal plane.

Neuro acupuncture and spasticity in spinal cord injury

In traumatic paraplegia, some patients develop an important and "explosive" spasticity (knee and hip extensors for example), which destabilizes them and threatens to bring them down from their wheelchairs, despite anti-spastic treatments. Acupuncture used regularly on this group of muscles reduces the intensity of spasticity. An examination of skin electricity shows the regulatory impact of acupuncture sessions. It shows as well, an interaction between punctures below and above the lesion level, as if, on the skin electricity level, there were no discontinuity.

Is it a technical anomaly from the recording or the expression of an electric continuity?

#### 4. Neuro-acupuncture and dystrophy-myopathic pain

How does muscular pain, in the context of dystrophy, express itself? Does the rarity of muscular fibers lead to the saturation of the remaining fibers? A couple of cases in these pathologies, as different as facio-scapulo-humeral myopathies or mitochondrial myopathies, allows us to recommend the use of neuro-acupuncture for these pathologies where muscular pains have demonstrated an uncommon expression. There is a large diversity of myopathic pains, and the acupuncture practitioner can adapt his methodology accordingly.

#### 5. Neuro-acupuncture and neuropathic pain

Neuropathic pain is difficult to treat in occidental medicine. Medication leads often to side effects when given in an effective dose. Sessions of acupuncture (20-30 minutes) can improve patients' condition. But there is a more efficient technique which consists of needles inserted parallel to the skin, and left for a couple of days or a week, protected by plastic film. We call this technique semi-permanent needles. Whether it is in a post-surgery context (allodynic pain) or after a stroke (thalamic pain), semi-permanent needles improve the algic profile of patients (Figure 2).

Allodynic pain

Allodynic post-surgery pain is peculiar depending on the localization of the pathology (spinal tumor for example) and the surgery carried out. The treatment by acupuncture proposes a new solution, physical, to this pain which can reach 10/10 at light touch. After a 30-minute session of needling to observe the reaction of the patient, semi-permanent needles are then fixed. Pains often evolve in an on/off manner, as soon as the needles are put in the skin and as long as they remain fixed. Gradually, sessions after sessions, the pain level decreases and the allodynic surface reduces itself and can sometimes disappear completely. We have noticed that patients dealing for a long time with a pain on a scale of 8-10/10, that was affecting their life on a daily basis, recovered from a 4/10 level to an almost "normal" life.

Thalamic pain

Thalamic pains after a stroke are perceived by the patient as a half-body pain, but palpation reveals that it is in fact often limited to lines as *shou yang ming* (手阳明) on the upper limb and *zu shao yang* (足少阳) on the lower limb. One or a couple of sessions are needed to appreciate the patient's reaction to the puncture of these painful points (whether they are acupuncture points or not). In a second time, (second or third sessions), semi-permanent needles are fixed for a week maximum.

#### 6. Neuro-acupuncture and amputation neuroma pain

The stump of an amputated limb can be painful in many different ways:

sensation of missing limb (which is not really painful), pain of the phantom limb (persistence of severe pain felt in the initial context of amputation), vascular pain (ischemic arterial or venous stasis), pain linked to a defect in equipment and finally pain in connection with pathologic neuroma. Neuroma is the natural scar of the amputated nerve and in 95% of the cases, there is no problem resulting. The neuroma can become pathological when connections are created between nervous fibers of motor, sensitive or vegetative nature. Pain then become increasingly intense, and resistant to physical treatments and medication.

The pragmatic use of acupuncture on the stump can “break” this chain of painful paroxystic phases, which are worsening in time. A gradual feeling of appeasement occurs, sometimes up to a total disappearance of the pain. A bio-electric study has shown an electric signal which diminishes after puncture. This clearly demonstrate, for us, the role of electric conductor of the acupuncture needle (Figure 3).

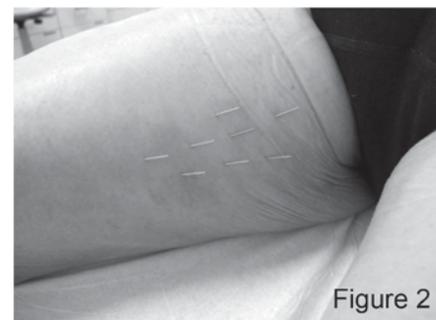
**Conclusion:** Performed pragmatically by combining chinese needle technique and occidental neuro-anatomy, neuro-acupuncture can respond, associated or not to occidental medication and physical therapy, to pain that have become very difficult to take care of: spastic pain, myopatic pain, allodynic and thalamic pain, pain from neuroma amputation. Neuro-acupuncture may have a special place integrated in the treatment of patients in Physical Medicine and Rehabilitation department.

Note 1: The Chinese technique of *ashi* (啊是) puncture is very close to this method.

Figure 1: Young patient with fibromyalgy (mainly neck and upper back pains), improved by acupuncture and physical therapies

Figure 2: Little acupuncture needles for neuropathic pain, left in place for few days (protected by a plastic film)

Figure 3: Recording of electrical signal during an acupuncture session for leg amputation neuroma pain



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### **Post herpetic neuralgia managed with high frequency electroacupuncture**

**C. Chan**

President ICMART, Immediate Past President Australian Medical Acupuncture College

**Purpose:** Report on 4 cases of post herpetic neuralgia of the chest treated with high frequency electroacupuncture.

**Aims:** Studies of electroacupuncture treatment for post herpetic neuralgia yield encouraging but mixed results. 4 successful cases are presented to stimulate interest in this modality of treatment for a potentially disabling condition.

**Methods:** 4 cases of thoracic post herpetic neuralgia were treated with high frequency low intensity electroacupuncture.

**Results:** Pain reduction ranged from very good to excellent, and analgesic medication was able to be discontinued in all cases.

**Conclusions:** Brief discussion of the neurophysiology. Further studies required to find the treatment parameters that produce optimum results.

**Biography:** President ICMART. Immediate Past President Australian Medical Acupuncture College. Medical acupuncturist in private practice.

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#### ***Electroacupuncture at 'forbidden points' in pregnant wistar rats' health***

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Much has been studied and published about acupuncture and pregnancy. Many complaints in prenatal time can be resolved by acupuncture like nausea and vomits, low-back pain, insomnia, digestive problems and depression. Even so, many acupuncturists are afraid of using some points – so called 'forbidden', according traditional knowledge – in this period. In a recent paper we showed that we could not produce any harm in Wistar rats' pregnancy outcome. In this study we search for any problems in dam's health using this 'forbidden' points.

**Participants:** Forty-eight pregnant Wistar rats randomly divide into 4 groups:

total control, where the animals were left in cages without manipulation; anesthetized control, where they were manipulated and anesthetized but did not received Electroacupuncture; peripheral and sacral points, where the rats were anesthetized and received 4 acupuncture points – LI4-SP and BL27-28, respectively.

**Methods:** The primary end point was Maternal weight gain. Other evaluated parameters were Glucose, Creatinine, Alanine aminotransferase (ALT) and Aspartate aminotransferase (AST) rates, and the histopatological evaluation of rats' livers and kidneys.

**Analysis:** Analysis of variance (ANOVA) was used when data were normally distributed, and Kruskal-Wallis was used when this was not the case. If any difference was seen, it was calculated as between-group comparisons with the Bonferroni correction. The adopted significance level was  $\alpha=0.05$ .

**Results:** The Kruskal-Wallis test with Bonferroni adjustments for pair wise comparisons of medians showed that the Total Control group gained more weight than the Anesthesia control group ( $p = 0.0064$ ) and Sacral Points group ( $p = 0.0004$ ). There was no difference, however, between the total control group and rats that received peripheral points, the most famous points commonly cited as responsible for harm in pregnancy. Since a difference was seen in just one of the treated groups, it is not possible to conclude from this data that acupuncture in those points could reduce weight gain. We did not find any difference between the other parameters.

**Conclusions:** We found no evidence that acupuncture in LI4-SP6 and sacral points could be harmful to the health of pregnant Wistar rats.

## **Electric acupuncture and inflammatory disease - Neuro immune evidence**

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Physiology of endogenous counterinflammatory mechanisms came from the past 2 decades of research on the pathogenesis of acute inflammation hypercytokinemia, and fatality associated with severe sepsis and septic shock. Experimentation have shown that the brain and the innate immune system form a bidirectional network via both the neural and humoral pathways, in which the immune system operates as a sensory organ to inform the brain about inflammation and tissue injury, and the brain in return orchestrates a limited and localized inflammatory response. Evidence show parasympathetic system plays the down-regulation of cytokine synthesis and containment of somatic inflammation. The vagal outflow, innervates major organs (monocyte-macrophage, reticuloendothelial system), known as autonomic outflow that keeps resting heart rate at 60 to 80 bpm and controls digestive and hormonal activities. Tracey et al found that it also plays a systemic immunoregulatory and homeostatic role called "cholinergic antiinflammatory pathway". The authors present a case of rheumatoid arthritis where the disease course was modified by electrical acupuncture. Were used for that specific parameters of stimulation.



The authors defend that stimulation parameters used shall be low frequency, 1-5 Hz, electric current - microcurrent with a stimulation time between 20-30 minutes, square wave. Acupuncture points used - Points haibu yuketsu – boketsu (SHU-MU in Tradicional Chinese Medicine) are most effective. The patient was therapeutic with corticosteroids for several years, with electric acupuncture could be a weaning the amount of steroids that the patient performed, as well stopping medication with corticosteroids. With this work the authors intend to demonstrate the importance of electric acupuncture in the course of disease for which conventional therapy can not yet provide answers and thus put the electric acupuncture as an added value to the fight against debilitating diseases such as autoimmune diseases. Focus importance of immune neuro endocrine axis in the development of these diseases, with primary attention to the processes of self - inflammation.

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### **Treatment of macular degeneration with electro-acupuncture**

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The macula is the central area of the retina, which provides the most detailed central vision.

Macular degeneration is a medical condition which usually affects older adults and results in a loss of vision in the center of the visual field (the macula) because of the damage to the retina.

It occurs in "dry" and "wet" forms. It is a major cause of blindness and visual impairment in older adults (>50 years).

Macular degeneration can make reading or recognizing faces difficult or impossible although enough peripheral vision remains to allow other activities of daily life.

Macular degeneration is classified as:

- 1 Juvenil Macular Degeneration(Stargardt's macular dystrophy)
- 2 ARMD (Age related Macular Degeneration)
- 3 Complication of RP

**Purpose:** Macular degeneration is a genetic disease, incurable with western medicine methods. Although IVTA and anti VGF injections into the eyes provide a temporary reduction of macular edema, vision acuity of the patient (central vision loss) remains definitely stable.

Our major target in treating this disease is providing permanent improvement of patients central vision.

**Method:** We used 0.25x0.25 steel needles and applied electro-acupuncture. The 25 minute sessions were applied 1-2 times per week and we compared the vision-field and OCT results at the end of 20 Sessions. At the end of the electro-acupuncture sessions an improvement has been seen not only in shortening of the adaptation time and color discrimination but also in vision acuity. Reduction of macular edema and significant improvements in macular

atrophy has been seen with further OCT investigations.

**Conclusion:** The results show us clearly that we can cure Macular Degeneration, Macular edema and Stargardt's macular dystrophy. Because of the disappointment of other treatment techniques the electro-acupuncture treatment seems to be the only choice in genes therapy.

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### **The dynamics of cognitive impairment in patients with chronic vertebrobasilar insufficiency**

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The purpose of this study was to investigate the influence of reflex therapy on the cognitive impairment in patients with chronic vertebrobasilar insufficiency.

**Material and Methods:** A sample of 77 patients (51 women and 26 men) consecutively hospitalized in 44th neurological department of SP Botkin Clinical Hospital, with chronic cerebrovascular disorders attributed to vertebrogenic causes.

Along with the clinical neurological and instrumental examination, all patients were evaluated with neuropsychological tests to identify cognitive impairment at baseline, after the end of treatment, and 3 months after it. Testing was conducted in two phases, taking into account the initial level of education of patients.

In 49 (64%) patients was noted mild cognitive impairment in the form of slowing down the completion of psycho-diagnostic tests by reducing the concentration and stability of attention and psychomotor speed reactions. The

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rest 28 (36%) patients were identified with moderate cognitive impairment, which was found even in those tests where the record of completion time has not been taken in account. An important diagnostic feature was the preservation of the ability to compensate for cognitive defect: providing hints or actions of the algorithm significantly improves the performance of neuropsychological tests. In this group of patients dominated memory disorders and attention difficulties: structurally unstable in the test clock drawing, delayed recall of words, difficulty in performing tasks in the study of visual-constructional skills. Orientation and abstract thinking on these neuropsychological studies were impaired in only 2 (2.6%) patients.

Depending on the treatment, the patients were divided into 2 groups. Study group comprised of 41 patients. Of these, 22 patients had mild cognitive impairment, and 19 - moderate cognitive impairment. Complex treatment of this group included reflexology and biodynamic correction. The control group consisted of 36 patients (20 - with mild cognitive impairment, and 16 with mild cognitive impairment), who received conventional conservative therapy.

**Results and Discussion:** Application of methods of reflexotherapy in complex treatment of chronic vertebrobasilar insufficiency allowed the activation of opioid, serotonergic and noradrenergic mechanisms of antinociceptive system. Reflexology of the main group of patients was performed before the sessions of biodynamic correction within 10-12 days, using the sedation of corporal acupuncture, auricular acupuncture, microsystems acupuncture points, including points with general, segmental and local action. If there were found local areas of muscle hypertonia, was performed acupuncture needle roller surface, spot, segmental, vacuum massage.

Biodynamic correction is called the complex management of patients with degenerative-dystrophic diseases of the spine during the course of treatment and rehabilitation, which includes techniques of 'gentle' manual therapy, after pretreatment with reflex therapy.

Biodynamic correction of the study group aimed at optimizing the motor stereotype and the elimination of postural disorders, the normalization of

the functional relationships of bone structures and the ligament-muscular apparatus of the cervical spine. Biodynamic correction was performed every other day on the course 3-6 procedures on the whole.

Positive treatment effect was objectively noted in 18 (43.9%) patients of the main group and in 9 (25%) patients in the control group, by the readings of ultrasound duplex scanning of the brachiocephalic arteries: Normalization of the arterial component of cerebral haemodynamics (increase in pulse blood, reducing its asymmetry, normalization of the linear blood flow velocity).

Based on neuropsychological testing, positive effect was noted, after the course of treatment in the main and control groups of patients, in the form of increasing the speed of neurodynamic processes, improving short term memory and concentration.

Thus, the use of acupuncture and biodynamic correction in the complex treatment of chronic vertebrobasilar insufficiency is pathogenetically justified, can effectively control the pain, reduce the manifestations of vestibular-atactic, pyramidal, autonomic-vascular syndromes, normalize the functional relationships of bone structures and the ligament-muscular apparatus of the cervical spine, resulting in improvement of cerebral hemodynamics, cognitive function and general well-being of patients.

#### **Conclusions:**

1. The presence of vertebral neurological syndromes significantly worsens the main vascular disease, leading to an earlier decompensation of the vascular system of the brain and early manifestation of cognitive impairment.
2. The use of acupuncture and biodynamic correction in patients with chronic vertebrobasilar insufficiency increases the effectiveness of complex treatment compared with conventional therapy, which is confirmed by neuropsychological studies of patients with discirculatory encephalopathy due to vertebral pathology.

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**Reflexotherapy in the complex treatment of birth plexitis**

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Neonatal brachial plexus palsies are the most common between neonatal peripheral nerve system lesions. An incidence of 0.5-4.4 cases of brachial plexus palsy per 1000 full-term births has been reported. In this article we review the mechanisms of the aetiopathogenesis and the clinical forms of the birth plexitis. Description of principles and methods of acupuncture follows: combination of acupuncture with other methods of treatment depending on the severity of lesion and the age of patients. The efficacy of acupuncture is shown in the combined treatment of the birth plexitis. 194 patients who were diagnosed with neonatal brachial plexus palsies (3 months old -5 years old) 98 girls and 96 boys received treatment. Between them 118 больных (61%) had right arm plexitis and 76 (39%) left. In order to objectively measure patient's condition during treatment and rehabilitation, following methods were used: physical and neurological examination, response of the neuromuscular unit, rheovasography of the upper limbs. Complex treatment in combination with reflexotherapy, developed in our clinic, resulted in increase of the effectiveness and is possible to implement from neonates.

**Key words:** acupuncture, birth plexitis.

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**Investigate reflexotherapy influence on humoral non-specific defense.**

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Russian Federation Minister of Health and Social Development

Russian Medical Academia Postgraduation Aducaation Depart of Reflexology and Manual Therapy

The goal of our work was to investigate reflexotherapy influence on humoral non-specific defense as resistance level indicator and thus to detect treatment efficiency. Immunological shifts in the case of osteochondrosis are described in literature. Many investigators conclude that metabolism disorders in intervertebral disk form the basis of osteochondrosis pathogenesis. It changes the biochemical structure and physico-chemical properties of connective tissue in intervertebral disks. Disorder of disk glycosamoglicans depolymerization and repolymerization is due to depolymerization prevalence.

We have investigated lyzozyme activity, compliment level, serum bacteriological properties, beta-lysine concentration at 72 patients after reflexotherapy treatment.

As it was turned out from the study, reflexotherapy has influence on humoral response factors besides other well-known effects as analgesic, sedative and vasodilator. Our data show tonic effect of reflexotherapy due to neurohumoral influence and this can reveal reflexotherapy action mechanism.

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**A holistic approach in dentistry**

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Acupuncture treatments support the internal organs (kidney-liver-intestines)

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during the detoxification procedure, increase the endorphins levels and have strong anti-inflammatory action. As a dentist I am practicing the “dental clean up” following the protocols of IAOMT for safe removal of amalgam fillings and using my knowledge of Acupuncture and Global Perceptiveness method help people to overcome the difficulties of the detoxification and develop harmony and wellbeing. New tools for therapists to analyze and classify information from patient history increase the positive responses to balancing formulas.

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### ***Innovative technologies to quantify TCM observables: A geriatric bracelet for continuously monitoring life signals***

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**Relevance:** In the context of populations and environmental deterioration all over the world, one can notice an epidemiological transition of a predominance of acute infectious diseases to more chronic non-transmittable diseases <sup>[1]</sup>. Social security and health organizations should adapt to this transition by focussing more on prevention and long-term care in a home- or community-based setting, rather than on immediate clinical interventions in the hospital <sup>[2]</sup>. One drawback of the current Western medical paradigm is that its diagnosis is based on symptoms and loss of functionality, when a disease is already past its initial state. One solution is the development of new non-symptomatic biomarkers, that is, health indicators that have the potential to enhance predictive power because they are applicable when the patient is still without symptoms. Heart Rate Variability (HRV) is an example of such a non-symptomatic biomarker that has attracted a lot of research interest lately, and that has proven to be a very successful predictor of mortality and many types of morbidity <sup>[3]</sup>. Research in HRV has been realized from many fields of knowledge, including mathematics, engineering, physiology, and clinical

medicine <sup>[4]</sup>. With the proper technological innovations, other physiological observables could be monitored and analyzed in a similar way and would offer a global and holistic view of the health state of the whole body.

**Purpose:** In a multidisciplinary collaboration between the academic world, the National Health Institutes, and the Mexican industry, with a team of physiologists, cardiologists, engineers, physicists and informaticians, we are currently developing an innovative geriatric bracelet to continuously monitor, quantify and digitalize the physiological observables of (i) radial pulse, (ii) motoric activity and (iii) body temperature. We are also working on a service platform based on artificial intelligence that analyzes the data automatically and emits warning signals to predict emergencies.

**Methods & Analysis:** The geriatric bracelet monitors previously unaccessible physiological observables. We are currently collecting data in patients, and research is underway to identify the most adequate non-symptomatic biomarkers. Here, a collaboration with specialists in Traditional Chinese Medicine (TCM) might prove most fruitful, as we can offer a quantification of traditional observables such as the radial pulse, whereas TCM can teach us where to look for the right biomarkers. On the other hand, continuous data on motoric activity can help in the diagnosis of the restless legs syndrome.

Grants:

**IMPORTANT:** fill in the reference numbers of the CONACYT projects

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***What really matters in acupuncture - A multi-method approach for an intercultural comparison between China, Argentina, and Germany***  
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Acupuncture is practiced worldwide and has become subject of international research. The main focus of such investigations mainly lies on the clinical effectiveness or mechanisms underlying the acupuncture effect. Although, so called unspecific or needle independent treatment effects e.g. the patient-acupuncturist interaction are assumed to be of particular importance for the effectiveness of acupuncture, the impact of the social cultural context is still poorly investigated. Therefore, it is necessary to identify cultural and individual factors that might influence acupuncture treatment and research. For such proposition the method of choice is the collection of qualitative data. In our investigation qualitative and quantitative methods were combined in order to identify cultural differences in acupuncture practice as well as the underlying health concept and understanding of acupuncture and healing.

This intercultural cooperation study was conducted in Argentina, China and Germany. In each country 14 patients treated with acupuncture for sub-acute and acute neck pain in the cooperating centers were included. As qualitative methods semi-structured interviews, field notes and questionnaires were used. Questions of interest concern the general health concept, the understanding of illness and healing in the theoretical framework of

acupuncture, expectancies and satisfaction with the treatment outcome. Interviews were transcribed, translated into German and subsequently analyzed by means of the qualitative content analysis according to Mayring. Quantitative outcome measures included the pain intensity evaluated by the visual analog scale (VAS) and the cervical range of motion (CROM) measured with a standardized inclinometer.

No prominent differences were found between patients of the three countries with regard to changes in pain intensity and CROM. The interviews revealed that Argentineans related their complaints more often to emotional or social strains than their Chinese or German counterparts. Following this, a sincere doctor patient relationship seemed remarkably important for both patients and therapists in Argentina. However, in Argentina as well as in Germany the patient was saliently cordial and characterized by personal communication. In China treatments were more characterized by treatment orientated communication. With regard to the understanding of the mode of action of acupuncture, interviews revealed prominent similarities. Patients and therapists of all countries mentioned frequently the removal of blockages, the reconstitution of a certain balance and harmony as well as changes in body energy. However, Chinese and Argentinean patients often assigned mystic aspects to acupuncture, while Germans focused more on physiological or neurological concepts in their explanations. Many patients as well as therapists who favored acupuncture noted a certain discontent with conventional methods for the treatment of painful conditions, although, only German patients seem to turn to several other alternative treatment approaches. The decision to try acupuncture was taken in Germany often on recommendations by the doctor rather than by friends or family, as it was the case in Argentina and China.

In conclusion, we found prominent similarities, but also striking cultural differences with regard to what seems to be important in acupuncture in the view of patients and therapists. Consequently, it can be assumed that the social cultural context has an important impact on the education and daily practice of acupuncture and implications for acupuncture research. Thus, the

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intercultural exchange within the field of acupuncture is surely conducive, both for acupuncture practice and research, and should be intensified.

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***Acupuncture treatments in assisted reproduction – Results from a survey of fertility centers in Switzerland, Germany, and Austria***

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**Purpose and Relevance:** Childlessness is a burden for every fifth couple. To increase the effectiveness of assisted conception, adjuvant acupuncture treatments are frequently administered. While the examined acupuncture treatments in randomized controlled trials (RCT) related to acupuncture in assisted reproduction are predominantly based on a standardized protocol of pre-defined acupuncture points, little is known about acupuncture treatment modalities employed in fertility centres. The aim of our study was to assess modalities of acupuncture treatments in IVF/ICSI clinics.

**Participants and Methods:** Referring to fertility centers listed on the websites of the Swiss, German and Austrian national fertility associations, 180 centers were invited to participate in an online survey assessing the provision of acupuncture in assisted reproduction.

**Analysis & Results:** We have conducted descriptive analysis using the statistical software package SPSS. The responder rate was 47.8%. Acupuncture in assisted reproduction is offered by 33 (38.4%) of all responding clinics (n=86). 13 clinics (39.4%) are using a standardized treatment protocol, while in 9 clinics (27.3%), the selection of acupuncture points is based on individual traditional Chinese medicine (TCM) diagnosis. Both approaches are considered in 8 clinics (24.2%). 3 clinics (9.1%) did not provide any information about point selection. TCM body acupuncture is used in 28 clinics (84.8%)

and in 8 of them (24.2%), ear acupuncture is additionally administered. 5 clinics (15.2%) provided no details about acupuncture method and mode of stimulation. Manual needle stimulation is the most frequently reported form of stimulation (84.8%) with 7 clinics (21.2%) additionally applying moxibustion.

**Conclusion:** Standardized acupuncture treatments as investigated in RCTs are employed by less than 40% of all acupuncture offering fertility centers in Switzerland, Germany, and Austria. To increase the external validity of acupuncture research related assisted reproduction, more studies with semi-standardized and individualized point selection should be conducted.

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***Clinical acupuncture applications in human and animals, is there a common point?***

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<sup>1</sup> Spain

<sup>2</sup> Greece

Perceived sensations are not only neurophysiological expression of feelings, but also influenced by individual characteristics of each patient: previous experiences, religion, learning, so racial, cultural and psychological factors.

Quality and intensity of this experience is influenced by patient's history, the sense that patient gives to the producing pain situation, or mental state of the moment. All these elements form a "puzzle" which have a great influence both the development of the disease and treatment outcome.

When a patient suffers a disease or their consequences (pain), perception becomes a complex understanding of sensory information of tissue injury and patient's management of this information not only in a purely sensory level but in a psychological level.

Patients with chronic pain, or chronic ailments show special psychological

features in its symptoms, in pain perception areas, emotions, knowledge, expectations, significance of disease or pain.

Same lesions can cause different effects on different individuals or even in the same patient at different times. Psychological variables can take part between stimulus and perception of pain and may produce different expressions of pain and different responses to the same medical treatment.

Interactions between neurophysiological and psychological factors may provoke either positive placebo effects or negative nocebo effects. Placebo effects help self-healing process while nocebo effects help self-destruction.

Success of any medical procedure, including acupuncture, depends of individual self-healing ability. This may explain why same treatment used for same pathology can produce different results.

Both, animals and people, are influenced by psychological factors, controlled by neurotransmitters. Acupuncture effects on neurotransmitters should be well understood to help placebo effects to reach best therapy results.

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**The application of modern MeriDiM meridian diagnostics in energy medicine, in the practice of acupuncture and in scientific research**

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**The main targets:** The aim of the research is to emphasize the necessity of the graphic presentation of the state of the 12 main meridians -in case of both chronic and acute disorders- and to map the eventual lack of energetic equilibrium as well as to document functional harmony, the balanced functioning of the body after a well-chosen treatment in a way that the objective follow-up of patients would be ensured.

**Relevance:** Different energetic therapies (acupuncture, auriculotherapy,

homeopathy, Bach flower remedies, Schuessler Tissue Salts) can integratively influence biological functions, so as harmonize the various functional disorders of meridians, that is positively influence biothermodynamic states. (integration.jpg).

**Participants:** The authors introduce possibilities of integrative therapies and the importance of documentation and follow-up procedures in acute and chronic cases through factual examples following the way of energy harmonization. Example of integrative therapy:

1. subject: 70-year-old lady in good physical condition suffering from incontinency

**Follow-up and documentation:**

1. subject: 80-year-old gentleman with acute energetic disbalance (2\_subject.jpg)
2. subject: 58-year-old lady with chronic energetic disbalance (3\_subject.jpg)

**Methods:**

1. subject: MeriDiM energetic diagnosis and auriculotherapy + Schuessler Tissue Salts therapy
2. subject: MeriDiM energetic diagnosis and auriculotherapy by laser
3. subject: MeriDiM energetic diagnosis and auriculotherapy + Bach flower remedies

**Analysis:** By MeriDiM diagnostic device based on TCM; measurement results shown by graphs and charts (energetic condition of 12 main meridians, 5 elements – 4 movements, functional organs’ clock); evaluation of actual energetic conditions measured after different therapies (auriculotherapy, Bach flower remedies, Schuessler Tissue Salts). Results: 1. subject: 70-year old lady in good physical condition who was treated by auriculotherapy 14 times + was given Schuessler Tissue Salts. Her incontinency ceased. 2. subject: 80-year-old gentleman Over the course of 16 months he was preventively measured by MeriDiM once every two weeks – so altogether 35 times – followed by laser auriculotherapy and a repeated measuring. During follow-up the charts and graphics demonstrate well that the acute energy disbalances ceased.

3. subject: 58-year-old lady MeriDiM diagnostics, then the application of

auriculotherapy and Bach flower remedies. 5 treatments were needed over 60 days to correct the chronic energy disbalances.

**Resumé:** Healers and therapists can detect disorders not just by their senses or heart, but they can objectively measure and visually present the conditions of the 12 main meridians. Psychology proved long ago that 'one image worth a thousand words'. To treat a patient successfully it is needed to make an anamnesis by asking questions and the traditional diagnostic approach of TCM but it is equally important to do exact, objective diagnosis by which we can prevent work by the trial and error method. Diagnosis is followed by an integrative application of different energy therapies, the positive and effective influencing of biothermodynamic processes of human being.



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### **A concise Chinese clinical synopsis supplemented with suggestions for treatment according to the deadman-Al Khajafi manual**

**J.P.J. Fossion**

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**Background:** Students in Traditional Chinese Medicine (TCM) asked the Belgian Association for a concise clinical synopsis as an overview to follow the transformations between the pattern configurations of Chinese syndromes.

**Aim:** We follow a Western psychological approach to introduce the Western students in TCM <sup>(1)</sup>. We supplement this Clinical Synopsis with point suggestions from the compilatory manual by Peter Deadman <sup>(2)</sup> for the treatment of pattern medicine.

**Result:** The identification of Chinese pattern medicine with canonized psychological models in Western medicine allows us to propose all publications, in the concerned Western experimental paradigms, to explain the Chinese syndromes as well. Neuroscience commits itself to indicate structural pools of neurons in hypo- or hyperfunction to generate a complex of mirror symptoms <sup>(3)</sup>. We examine if both, the Chinese- and Western syndromes are compatible with each other. We introduce a tracing postulation for research purposes.

**Conclusion:** If we would inject acupoints with a tracer (neurotoxin or pseudovirus), we could follow the terminal arborization of the primary afferents of the receptive field (= acupoint). The identification of neuronal pools in the spinal medulla (zones of Rexed), by dyeing the toxin in microscopic sections, could give an indication as to the functions of the acupoints. A further postulation of the use of transsynaptic tracers introduces us to the possibility of studying supramedullar nuclei into their indications of acupoints. The Chinese clinical synopsis could be a tool of research by predicting where the sections should be made to verify if our initial identification would be correct <sup>(4)</sup>.

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***Bridging the gap between western and traditional Chinese medicine: Quantifying the qualitative, and making the static dynamical***

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**Relevance:** Modern Western Medicine has been extremely successful in the diagnosis and treatment of “simple” diseases, that are typically caused by structural organ damage. In the context of ageing populations and environmental deterioration all over the world, there is an increase of so-called “complex” diseases, such as age-related fragility, fibromyalgia, chronic fatigue, depression, hypertension, etc., where the cause is not structural but rather dynamic, depending on the interactions between organs and biological processes in a network<sup>[1]</sup>, and related to a loss of adaptability of the homeostatic and stress systems<sup>[2,3]</sup>, which cannot be easily explained within the current Western medical paradigm<sup>[4]</sup>. On the other hand, in Traditional Chinese Medicine (TCM), most of the syndromes are of dynamic nature, and thus TCM can inspire to explore complex diseases in Western Medicine from a fresh point of view. A major barrier between Western Medicine and TCM are the quantitative requirements of the former and the qualitative nature of the latter. In the last few decennia, major technological breakthroughs make it possible to monitor physiological body functions continuously, ambulatory and for an affordable price (EEG, ECG, holter, etc.), such that the dynamics and interplay of a wide range of these complex functions can be studied and quantified. The usual physiological variables, such as the instantaneous heart rate, are “static” and can be analyzed and interpreted with conventional

statistical methods. In the new continuous physiological data, called “time series”<sup>[5]</sup>, such as the way in which the heart rhythm varies in time, a wealth of information is hidden, but for which new non-linear statistical methods must be developed<sup>[6]</sup>. A recent research article compares the linear statistical methods of static variables with photographic technology, and the new non-linear statistical methods with video technology<sup>[7]</sup>.

**Purpose:** To construct a multidisciplinary theoretical framework, based on the adaptive homeostatic and stress systems of Western Medicine, inspired in TCM, measured and quantified with innovative technologies and analyzed with new statistical methods of the exact sciences, in which “complex” diseases can be explained<sup>[8]</sup>.

**Conclusions:** Innovative technologies and new statistical methods offer a bridge between Western Medicine and TCM, on the one hand by quantifying the qualitative observables of TCM, on the other hand by allowing continuous monitoring, thus rendering static Western Medicine dynamical.

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## POSTER PRESENTATIONS

### ACUPUNCTURE MEETS WEST

1

#### ***Effects of real and sham auricular stimulation on anxiety status in healthy volunteers. Blind crossover study vs. Placebo. Preliminary data***

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**Introduction:** The auricular acupuncture seems to be effective in reducing anxiety associated to ambulance transport <sup>(1)</sup>, lithotripsy treatment for kidney stones <sup>(2)</sup> or prior surgery <sup>(3)</sup>.

The **purpose** of this study is to evaluate the effect of real and sham auricular acupuncture on anxiety status in healthy volunteers.

**Materials and methods:** We enrolled 11 healthy individuals with a mean age of 34.3 years, 4 males and 7 females. Participants were invited to participate in the trial without warning and left in a quiet room alone for 10 minutes in the supine position with monitoring of heart rate. Then we made the detection of both ears with 250g pressure detector to search painful areas. All the points highlighted were then used for the treatment with the auricular acupuncture.

The needles used were the DONGBANG Acuprime® size of 0.22 in thickness and 1.5 length. The needle placebo had all the features without the tip of the needle true. All volunteers were subjected to real and sham acupuncture, the succession of the two methods was determined by randomization.

Between the two tests we had two weeks of discontinuation.

For the assessment of anxiety was used the State-Trait Anxiety Inventory were scales (STAI-S) designed to measure transitory anxiety states, administered before and after each treatment, and a subjective scale VAS with a range of zero to 10. During session the sedative effect was evaluated by Bispectral Index (BIS).

**Results:** The majority of points were highlighted in the areas of the tragus and antitrago, the apex of the triangular fossa. The mean of the points observed per subject was 3-4 bilaterally.

The VAS values and results of the STAI - tests show show a significant difference at the end of treatment only for the real acupuncture. The BIS value show a reduction for both groups but there is no statistically significant difference

**Conclusion:** The results confirm that auricular stimulation may have a therapeutic action on anxiety, from this study do not allow firm conclusions, however, indicate a greater effectiveness of specific auricular areas in treatment of anxiety status.

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2

#### ***The immediate effect of 3 different electroacupuncture protocols on fasting blood glucose in obese patients - A pilot study***

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**Purpose:** To determine the electroacupuncture (EA) protocol to be used in a future clinical trial examining the effect of acupuncture in influencing the metabolic parameters that are related to obesity. We analysed the pre-post intervention change in fasting blood glucose in obese subjects, where the intervention was one of three different EA protocols: dorsal segmental for the pancreas; points in all four limbs; ear points in the cavum conchae.

**Relevance:** Obesity is an increasing global health problem, and current methods of management are limited. Preliminary research data suggests acupuncture may have an influence on metabolic parameters related to obesity.

**Participants:** 16 women aged 30–52 with a BMI > 30.

**Methods:** We divided 16 obese patients into 3 groups, and measured their fasting blood glucose before and after administering a single session, lasting 30 minutes, of one of three EA treatment protocols. In group 1 (dorsal segmental) we chose acupuncture points in the back (BL18–23 bilateral, corresponding to the segmental levels innervating the pancreas). Group 2 (limb) received EA to points in the arms and legs (LI10–LI11, ST36–zongping). Group 3 (ear) received EA to ear points in the cavum conchae.

**Statistical Analysis:** Variables were evaluated using the Wilcoxon Signed-Rank test. Paired t-tests of mean difference = 0 (vs > 0) were used for all groups and signed Confidence Interval (CI) for median among groups (test of median = 0.000000 versus median < 0.000000). For all tests, a two-tailed  $p \leq 0.05$  was used for statistical significance. Analyses were performed using the statistical software MINITAB.

**Results:** After a single session of EA there was a statistically significant drop in fasting blood glucose in group 1 (dorsal segmental) and group 2 (limb), and there was no change or even a trend towards elevation of glucose in group 3 (ear). There was no significant difference in the decrease in fasting blood glucose between Group 1 & 2.

**Conclusion:** The findings of this small pilot study suggest that EA to either dorsal

segmental points corresponding to the pancreas or to muscle points in all four limbs may exert a beneficial effect on glucose metabolism in obese subjects.

### 3

#### ***Interference field tooth - Acupuncture non responders***

##### **R. Wander**

Dr. med., Präsident der DGfAN, Germany

Acupuncture activates our endogenous body inhibitory systems. If the endogenous evoked defensive action is not enough to cope with the problem, stimuli deletion processes must come in to help the body.

Neural therapy is a therapeutical method of empirical origin. It consists of the local, segmental, and ganglial injection of local anaesthetics, as well as injections into the "interference field". Until now, the distant effect of the interference fields has not been exactly clarified.

A slightly arthrotic joint with sufficient prostaglandin is still compensated and therefore painfree. Chronic inflammation of the sinus of the nose, tonsils and above all, the teeth, produces inflammation mediators, such as bradykinines and histamines. When bradykinines are transported from the mute irritation focus of the tooth, the "interference field tooth", to the joint, the transmitter substances potentiate, so that pain and inflammation are generated in the distant joint. The elimination of the tooth foci with neural therapy, the healing of the local inflammation, allows the distant joints to heal as well, by eliminating the potentiation of the transmitter substances.

In other words, a tooth as an interference field may cause lumbalgia and ischialgia with alterations of the intervertebral disks as a consequence of the functional chain. This segmental illness is what leads the patient to us. But the cause is an interference field whose site is distant from the pain site.

In many cases, the following defective position of the pelvis with a disturbance

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of the ilio-sacral-joints is relayed with the interference field“abdominal organs”. The teeth as interference fields are particularly persistent, difficult to diagnose and difficult to treat healing obstacles.

The dentist together with the physician has a responsible mission: the elimination of the most common interference fields, the teeth.

#### 4

### ***Effects of electroacupuncture intensity on heart rate variability and galvanic skin response in patients with chronic tension type headache*** **D.-H. Li<sup>1</sup>, K.M. Park<sup>2</sup>, S. Lee<sup>1</sup>**

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**Purpose:** The study was conducted to estimate the effects of electroacupuncture intensity in autonomic nervous system (ANS) concerning parameters - heart rate variability (HRV) and Galvanic skin response (GSR) among chronic tension-type headache patients.

**Participants and Methods:** Thirty patients suffering from chronic tension-type headache were randomly allocated to three groups and blindly received different kinds of electroacupuncture at the points of ST36 and ST37, thereafter designed as: Group A: fixed-intensity electroacupuncture (F-EA), Group B: varied-intensity electroacupuncture (V-EA), and Group C: control. The electroacupuncture administration was given three times per week, and continued for two weeks, respectively.

**Results:** After the electroacupuncture, there were no significant differences of HF, LF or LF/HF among three groups. However, V-EA showed a significant decrease of GSR compared to the stimulation state, while neither control nor F-EA did.

**Conclusions:** These results may suggest that there is a prospective effect of electroacupuncture by changing its intensity on regulating ANS and larger scale RCTs would be expected to draw a more rigorous evidence.

#### 5

### ***Influence of acupuncture on biological and morphological data of osteointegration in system maxilla-dental implant. Experimental case*** **I. Pohodenko-Chudakova<sup>1,2</sup>, L. Pashkevitch<sup>3</sup>, T. Shevela<sup>1</sup>, E. Oganova<sup>4</sup>**

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Purpose was to study the influence of acupuncture on the osteointegration in the system “maxilla-dental implant”.

**Relevance:** Reparative regeneration of the bone is genetically predisposed and it's impossible to force this process. Thus, there are some factors of regeneration which could have optimizing influence on. Medical literature about the osteointegration during the dental implantation with acupuncture is not available.

**Participants.** Examination was performed on 69 rabbits divided into two series. The series I was the control one (21 rabbits) and had no additional treatment. The series II (48 animals) had acupuncture treatment during 10 days stimulating the similar acupoint GI4 with the strong brake method. Examination was done according to the international standards on the experiments with animals.

**Methods:** Rabbits underwent the operation for the right central incisor extraction with further dental implantation. We examined the acid

phosphatase activity level (AP), level of the ions  $\text{Ca}^{2+}$  on 3, 7, 14, 21 days, one month postoperatively. Materials sampling for pathological examination was made during the same time.

**Analysis:** Statistical manipulations with the computer programs «Statistica 6,0» was applied for the results of biochemical examinations.

**Results:** When examining the activity level of AP, indices of control had no difference with indices of the 1st examination for the series II. During the whole examination we didn't fix authentic difference of these indices in tests of series II according to the initial data. We fixed authentic difference of indices under investigation during the second examination ( $18,5 \pm 1,61$ ) comparing with indices of control ( $24,93 \pm 1,21$ ) ( $p < 0,01$ ). Then it was not possible to find out the authentic difference.

The  $\text{Ca}^{2+}$  ions level had no difference in series I, II. The same indices came to  $0,8 \pm 0,05$  for 13 animals of the series I by 3 days postoperatively. This result was authentically less than the initial indices ( $p < 0,05$ ). The  $\text{Ca}^{2+}$  ions level continued increasing  $0,86 \pm 0,02$  by 14 days postoperatively but it remained the difference with control indices ( $p < 0,001$ ) and became normal by the 21 days ( $1,02 \pm 0,02$ ) what was different with initial indices ( $p < 0,001$ ). The same results were achieved by the 14 days for series II. This result remained during the next examinations.

During the postmortem examination we found advantages of the results of the series II for all terms. We also discovered the quicker maturation of the cellular fibrous structure of the connective tissue of layer between the implant body and the original bone. Manifestation of the necrosis and osteocytes necrobiotose on the edge of the original bone appeared less. The bone edges were more even and less indented. Resorptive changes became apparent in earlier terms and were insignificant by the end of the first month of examination. We established more intensive bone tissue formation processes in the region of implant. Small and large loop structures were formed more actively. The secondary change of the newformed bone tissue began in earlier terms and they were evident during the formation of the osteoid matrix.

**Conclusions:** Acupuncture has positive influence on the osteointegration in the system "maxilla-dental implant" during the postoperative treatment.

## 6

### **Reduction of Sol. Lidocaini chronic toxicity with acupuncture according to the morphometric examination data**

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**Purpose** was to study reduction of the Sol. Lidocaini hydrochloride 2% toxicity during its frequent application in maxillofacial area experimentally.

**Relevance:** Local anesthetics are frequently used in maxillofacial surgery and stomatology. They have side effects. The risk of there development depends on patient's common state determined by age, cardiovascular system, liver, kidney functioning, heightened sensibility to the medicines. The information about possibilities of chronic toxicity reduction of local anesthetics with acupuncture is not available now.

**Participants:** Examination was performed on 33 white laboratory mice divided into two series: series I - 16 animals (the group of control); series II (17 animals) underwent electroacupuncture treatment previously. Examination was done according to the international standards for experiments with animals.

**Methods:** Sol. Lidocaini dose was calculated taking into consideration the animal mass unit based on the clinic pharmacology data. Every 3-4 days we made injections of sol. Lidocaini hydrochloride 2% in dose 50 mg/kg into the submandibular region. We studied the animal's behavior after the anesthetic injections and fixed the toxic influence on the central nervous system, the dyspnea, some cases of lethality. We made the parenchymal organs sampling

for pathomorphological examination of died and put to sleep animals and the animals of the control series on every stage of the experiment.

**Analysis:** Microspecimens preparation was performed using the standard method. Morphometric examination was done according to the method of serial section.

**Results:** Lethality rate was 37,5% for the series I and 23,5% for the series II. Animals died within 5 minutes after injection and hemiparesis signs were evident on the side of injection, no convulsion discovered. Sometimes animals died during injections.

During the pathological examinations of the liver specimens we found necrosis focuses of hepatocytes with perifocal inflammatory reaction, perivascular infiltration, intraductal cholestasis.

After having examined the results of morphometry we discovered that animals of the series I had inflammatory changes of the portal tracts and cholestasis of the most of the fields of views where necroses were not found. The cells of the lymphoid row predominated among the cells of the inflammatory infiltration; the number of neutrophils and eosinophils was small. Animals of the series II had less of necrosis with less dimensions (till 1-4 cells). Cholestasis was weakly expressed. A big number eosinophils was found into the infiltration. Inflammation of the portal tracts was a little less. Comparison of the morphological results is demonstrated in the table below:

<i>Type of changes</i>	<i>Series I</i>	<i>Series II</i>
Focus of the hepatocyte necrosis 1-2 cells	72,5%	44,3%
Focus of the hepatocyte necrosis 3-4 cells	22,5%	17,2%
Focus of the hepatocyte necrosis 6-8 cells	7,5%	1,43%
Periportal necrosis 2-3 cells	2,5%	1,43%
Periportal necrosis 6-8 cells	5%	1,43%
Periportal necrosis 10-14 cells	5%	-
Periportal inflammation	55%	15,7%
Periportal cholestasis	52,5%	2,86%

Results of comparative assessment of series I and II were authentically

different ( $p < 0,05$ )

**Conclusions:** When analyzing results of experimental examinations we discovered that prophylaxis treatment with acupuncture for can considerably reduce the chronic toxicity after many times application of lidocaini.

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### ***Influence of acupuncture on cerebral blood flow in case of carotide stenosis***

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**Purpose:** To improve the quality of treatment of the patients with significant brachiocephalic stenosis using acupuncture as a part of a complex cure before carotid endarterectomy.

**Relevance:** Increasing occurrence of cerebrovascular accidents with high frequency of mortality and high-rate invalidism is a great problem nowadays. The most serious way of occlusive ischemic stroke prophylaxis is carotid endarterectomy. Purpose of preoperative treatment is improvement the enduring of hypoxia by cerebral tissue, because even the most accurate operation requires no less than one minute interruption of carotid flow; opportunities of acupuncture in this field were estimated in our study.

**Participants:** 40 inpatients of both genders 50-70 yrs. old with significant carotid occlusive lesions were included in the study. All of them had traditional indications for surgery and couldn't tolerate 1-minute common carotid artery compression on the side of stenosis even after course treatment. Patients got traditional medicinal treatment, after that 20 got another standard medicinal cure and 20 got individually defined acupuncture formula, including corporal

and scalpothrapy.

**Methods:** All the patients passed standard examination. Next step included 20-second apnea and 5 minutes later 20-second hyperventilation with registration of linear velocities (LV) of blood flow in middle cerebral artery (MCA) before test and during the third cardiac cycle after the test. Indices of vasoconstriction (Icon), vasodilation (IDil) and vasomotor reactivity (IVMR) were calculated. The last step was formed by carotid compression test (CCT) up to 1 minute in case of successful bearing with registration of LV in MCA before and after test, time of compression enduring. This battery of tests was performed before, after the first and second course of treatment.

**Analysis:** Statistics was performed using Student t-test, considering significant difference with  $p < 0,02$ . After the first course of treatment frequency and intensity of headaches and vertigo decreased in both groups; also in 10% of all patients ischemic attacks (TIA) ceased. Second course in control group lead to improvement of general state in 20% of patients and ataxia decreased in 15%. After acupuncture course in the main group 15% of patients with TIA had no more attacks, 25% of persons with hemiparesis got increase in muscle strength of 0,5-1,0 b, sensitivity improvement in 40% and decrease of ataxia in 25%. The first course of cure in both groups and second course in control group didn't cause significant changes in LV of collateral flow in MCA, toleration time of CCT and reactivity indices.

**Results:** After acupuncture treatment 12 patients in the main group could stand 60-second CCT and got surgical treatment: was observed significant ( $p < 0,01$ ) growth of CCT toleration time, LV of collateral flow in MCA, IDil and IVMR. So the principal consequence of acupuncture in our study was improvement of cerebral arteries dilation possibilities, that evidently helped to growth of collateral vessels and hence lead to collaterel flow LV increase.

**Conclusions:** 1. Acupuncture is effective tool for improvement of preparation quality before carotid endarterectomy by increasing cerebral tissue toleration to ischemia. 2. Acupuncture is effective as additional treatment way for patients with brachiocephal stenosis.

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**Neurodegenerative disease and acupuncture**

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**Introduction:** The auricular acupuncture seems to be effective in reducing anxiety associated to ambulance transport <sup>(1)</sup>, lithotripsy treatment for kidney stones <sup>(2)</sup> or prior surgery <sup>(3)</sup>.

The **purpose** of this study is to evaluate the effect of real and sham auricular acupuncture on anxiety status in healthy volunteers.

**Materials and methods:** We enrolled 11 healthy individuals with a mean age of 34.3 years, 4 males and 7 females. Participants were invited to participate in the trial without warning and left in a quiet room alone for 10 minutes in the supine position with monitoring of heart rate. Than we made the detection of both ears with 250g pressure detector to search painful areas. All the points highlighted were then used for the treatment with the auricular acupuncture.

The needles used were the DONGBANG Acuprime® size of 0.22 in thickness and 1.5 length. The needle placebo had all the features without the tip of the needle true. All volunteers were subjected to real and sham acupuncture, the succession of the two methods was determined by randomization.

Between the two tests we had two weeks of discontinuation.

For the assessment of anxiety was used the State-Trait Anxiety Inventory were scales (STAI-S) designed to measure transitory anxiety states, administered before and after each treatment, and a subjective scale VAS with a range of zero to 10. During session the sedative effect was evaluated by Bispectral Index (BIS).

**Results:** The majority of points were highlighted in the areas of the tragus and antitrago, the apex of the triangular fossa. The mean of the points observed per subject was 3-4 bilaterally.

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The VAS values and results of the STAI - tests show a significant difference at the end of treatment only for the real acupuncture. The BIS value shows a reduction for both groups but there is no statistically significant difference.

**Conclusion:** The results confirm that auricular stimulation may have a therapeutic action on anxiety, from this study do not allow firm conclusions, however, indicate a greater effectiveness of specific auricular areas in treatment of anxiety status.

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### ***Electric acupuncture and neurodegenerative disease***

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Amyotrophic lateral sclerosis (ALS) is a neurodegenerative disorder of devastating impact that cause injury and death of lower motor neurons in the brainstem and spinal cord, and of upper motor neurons in the motor cortex. The resulting progressive failure of the neuromuscular system usually culminates in death from respiratory failure. The worldwide incidence of approximately two per 100,000 individuals is fairly uniform, except for a few high-incidence foci, such as Kii peninsula and Guam. The mean age of onset is 55-60 years, and the disease more commonly affects men than women.

The average survival from symptom onset is approximately 3 years, although a proportion of patients have a slower disease course. ALS was traditionally considered to be a pure motor disorder. However, recent findings in subsets of patient with ALS have highlighted the involvement of sensory and spinocerebellar pathways, as well neuronal groups within substantia nigra and the hippocampal dentate granule layer. ALS is, therefore, regarded as a multisystem disorder in which the motor neurons tend to be affected earliest and most severely. The pathogenic processes underlying ALS are multi-factorial and, at present, not fully determined. The authors present a case of amyotrophic lateral sclerosis where the course of the disease was modified by electrical acupuncture, were used for that specific parameters of stimulation. The authors argue that the stimulation used shall be the low-frequency, 5 Hz, the current type is the most suitable electrical microcurrent with a stimulation time between 20-30 minutes. The wave is the most efficient square wave. As for the acupuncture points using the points haibu yuketsu - boketsu are most effective. With this work the authors intend to demonstrate the importance of electric acupuncture in the course of disease for which conventional therapy can not yet provide answers and thus put the acupuncture as an asset to the fight against debilitating diseases such as neurodegenerative diseases. Put into focus the importance of immune neuro endocrine axis in the development of these diseases, with primary attention to the processes of neuro-inflammation.



hypercytokinemia, and fatality associated with severe sepsis and septic shock. Experimentation have shown that the brain and the innate immune system form a bidirectional network via both the neural and humoral pathways, in which the immune system operates as a sensory organ to inform the brain about inflammation and tissue injury, and the brain in return orchestrates a limited and localized inflammatory response. This starts when unmyelinated sensory C fibers found in all major tissues and organs in response to a stimulus release substance P and other proinflammatory tachykinins, induce vasodilation, and increase vascular permeability and leukocyte margination. According to Matthay and Ware, these peripheral inflammatory events constitute danger signals that are conveyed via a fast transmission pathway involving the afferent vagus nerve to the viscerosensory nucleus tractus solitarius, and via slow transmission pathway involving cytokines originating from the choroid plexus and circumventricular organs and diffuse into the brain. The resulting acute stress response from the sympathetic nervous system is mediated directly by the nerve-to-immune-cell interaction, or indirectly by the adrenal neuroendocrine axis. The binding of catecholamine outflow to the  $\beta_2$ -adrenergic receptors expressed on immune cells leads to a decrease in proinflammatory (TNF, IL-1 $\beta$ , IL-6, and IL-18) and an increase in anti-inflammatory (IL-10) cytokines. The signal is also relayed to the hypothalamus and the dorsal vagal complex to stimulate the release of ACTH, thereby activating the humoral anti-inflammatory pathway. evidence show parasympathetic system plays the down-regulation of cytokine synthesis and containment of somatic inflammation. The vagal outflow, innervates major organs (monocyte-macrophage, reticuloendothelial system), known as autonomic outflow that keeps resting heart rate at 60 to 80 bpm and controls digestive and hormonal activities. Tracey et al found that it also plays a systemic immunoregulatory and homeostatic role called "cholinergic antiinflammatory pathway".

The authors present a case of systemic lupus erythematosus and rheumatoid arthritis where the disease course was modified by electrical acupuncture, were used for that specific parameters of stimulation. The authors argue that

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**Electric acupuncture. Immune neuro endocrin axis and inflammatory disease neuro immune evidence**

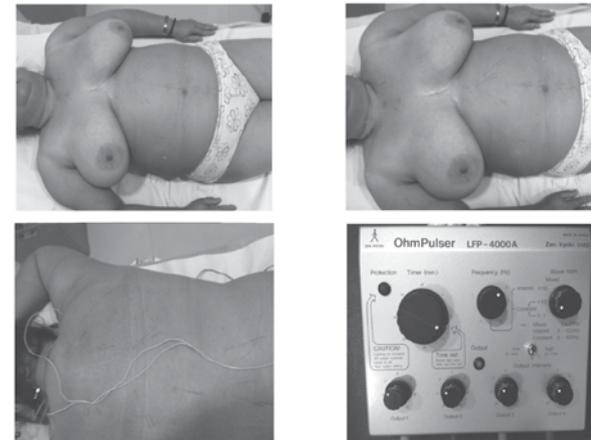
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Physiology of endogenous counterinflammatory mechanisms came from the past 2 decades of research on the pathogenesis of acute inflammation

the stimulation used shall be the low frequency, 1-5 Hz, electric current - microcurrent with a stimulation time between 20-30 minutes, square wave. As for the acupuncture points using the points haibu yuketsu - boketsu are most effective. The patient was therapeutic with corticosteroids for several years, with electric acupuncture could be a weaning the amount of steroids that the patient performed well as stopping the medication with corticosteroids. With this work the authors intend to demonstrate the importance of electric acupuncture in the course of disease for which conventional therapy can not yet provide answers and thus put the electric acupuncture as an added value to the fight against debilitating diseases such as autoimmune diseases immune. Put into focus the importance of immune neuro endocrine axis in the development of these diseases, with primary attention to the processes of self - inflammation.



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### ***Electric acupuncture and stroke***

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The authors present a case of stroke which resulted in quadriplegia, with motor deficits which are characterized by decreased strength and sensation in four members, but with greater intensity on the left side, including severe lumbar pain, and functional impotence, still in the same case trigger finger. The disease course was modified by electrical acupuncture, that were used for specific parameters of stimulation. The authors defend that the stimulation parameters used shall be low frequency, 5-10 Hz, electric current - Microcurrent stimulation with a duration treatment time Between 20-30 minutes, square wave. Acupuncture points used - points haibu yuketsu – boketsu (SHU-MU in Traditional Chinese Medicine) are most effective. Using Motor Points for

improving muscle strength. Application of the technique of Chaketsu in trigger finger and paresthesia. The patient had physical therapy for years without recovery. After three electric acupuncture sessions improvements were many, as regards strength, balance and mobility after 3 months of treatment the patient walks without assistance and are autonomous in their activities of daily living. With this work the authors intend to demonstrate the Importance of electric acupuncture in the course of disease for conventional therapy which can not provide answers yet. Thus demonstrate that electric acupuncture is effective in the fight against debilitating diseases such as stroke.



## ACUPUNCTURE MEETS EAST

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### *Effects of bloodletting therapy on peripheral facial paralysis: A retrospective study*

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**Purpose:** The aim of this study was to investigate the effects of bloodletting therapy on peripheral facial paralysis.

**Participants and Methods:** This retrospective study included 162 patients with peripheral facial paralysis, 107 of whom were treated with routine care only and 55 of whom were treated with routine care plus bloodletting therapy on 3 specific extra-meridian acupuncture points known as Samjoong.

**Analysis:** We evaluated changes in function using the Yanagihara and gross House-Brackmann grading systems before and after treatment.

**Results:** Yanagihara score significantly increased and House-Brackmann grade significantly decreased after treatment in both the routine care group

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and the Samjoong bloodletting group. However, the improvements in Yanagihara score and House-Brackmann grade were significantly greater in the bloodletting group than in the routine care group.

**Conclusion:** Our results suggest that Samjoong bloodletting therapy could be applied as an adjunct therapy to routine care for patients with facial paralysis.

This work was supported by the National Research Foundation of Korea (NRF) grant funded by the Korea government (MEST) (No.2011-0028968).

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#### ***Study on the efficacy of electro-acupuncture with chinese herbal medicine in hospitalized stroke patients***

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**Purpose:** This study was to evaluate the assessment of Chinese medical therapy on the efficacy and safety of hospital in stroke patients.

**Relevance:** Studies for these protocols, suggest significant differences in outcome between routine post-stroke care plus acupuncture and routine care alone. A recent systematic review suggested that acupuncture may have a small positive effect on motor disability, justifying further research. As one fifth of UK physiotherapists now use acupuncture, and many are directly involved in stroke rehabilitation, there is interest in evaluating this therapy. Many previous acupuncture and stroke trials included patients with transient ischemic attacks (TIAs), or involved only manual acupuncture,

whereas electro-acupuncture is quite commonly used as a standard Chinese stroke treatment modality. Thus we planned a study of two groups, electro-acupuncture and electro-acupuncture with herbal medicine, to evaluate the recovery of post-stroke patients

**Participants:** Totally 167 patients suffering from stroke in hospital within 6 months, accepting rehabilitation and nine times more of Chinese medical therapy were involved in this study.

**Methods:** All patients were divided into two groups. One group of patients accepted acupuncture only, the other one group of patients received the combination of acupuncture and intervention of Chinese medicine. All patients needed to be evaluated by a full Barthel Index and the National Institutes of Health stroke scale (NIHSS).

**Analysis:** Paired-samples T Test

**Results:** Totally 167 patients were included in this study. Acupuncture treatment and combination of acupuncture and intervention of Chinese medicine therapy significantly improved the score of Barthel Index and NIHSS ( $p < 0.05$ ). Acupuncture treatment greatly improved the Barthel Index score of displacement, walking, up and down the stairs. The combination of acupuncture and Chinese medicine therapy had great improvement on the Barthel Index score of eating, displacement, walking, up and down the stairs, clothes wearing, stool and urine control. For the evaluation of NIHSS, acupuncture treatment showed progress in facial palsy, left arm and left leg. The combination of acupuncture and Chinese medical therapy had progress in the NIHSS of consciousness (question and commends following), facial palsy, left arm, left leg, right upper limb, right lower limb, language, pronunciation difficulty. During the intervention of acupuncture, no side effects of hepatic and renal toxicity. The combination of acupuncture and Chinese medical therapy also showed no side effects on liver and kidney, but 12 patients with abnormal liver function and 9 patients with abnormal kidney function were greatly improved or returned to normal.

**Conclusion:** Conventional rehabilitation therapy and the assessment of Chinese

medical therapy could provide safety and efficacy for subjects suffering from stroke within 6 months. Further investigation about the synergistic effect of rehabilitation and Chinese medical therapy on stroke patients is required in the future.

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***Moxibustion for knee osteoarthritis: A protocol for a pilot randomized controlled trial***

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**Objectives:** The purpose of this study is to evaluate the feasibility of massive clinical research and to make a basic analysis on the effectiveness and safety of moxibustion treatment on knee osteoarthritis compared to usual care.

**Methods and Results:** This study is a protocol for a pilot randomized controlled trial. Forty participants are assigned to the moxibustion group (n=20) and usual care group. Participants assigned to the moxibustion group receive moxibustion treatment on the affected knee(s) at six standard acupuncture points (ST36, ST35, ST34, SP9, Ex-LE04 and SP10) three times per week for four weeks (total of 12 sessions). Participants in the usual care group don't receive moxibustion treatment during the study period and follow-up are made on the 5th, 9th and 13th weeks after random allocation. Both groups are allowed to use any kind of treatment, including surgery, conventional medication, physical treatment, acupuncture, herbal medicine, over-the-

counter drugs and other active treatments. Education material that explains knee osteoarthritis and current management options and self-exercise is provided for each group.

The pain scale of the Korean Western Ontario and McMaster Universities Questionnaire (K-WOMAC) is the primary outcome measurement used in this study. Other subscales of the K-WOMAC, The Short-Form 36 Health Survey (SF-36), Beck Depression Inventory (BDI), Physical Function test, Patient Global Assessment, and Pain Numeric Rating Scale (NRS) are used as outcome variables to evaluate the effectiveness of acupuncture. Safety are assessed at every visit.

**Conclusion:** The result of this trial will provide a basis for the effectiveness and safety of acupuncture treatment for knee osteoarthritis.

**Key words:** Moxibustion, Osteoarthritis, Pilot trial

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***The training of the individual system for control of body weight, hunger, feeling of fullness using the acupuncture***

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The **goal** of the investigation is the evaluation of the acupuncture influence on the of body weight reduction and the training of a relaxed attitude to eating for women.

**Methods and Materials:** The quantitative evaluation of the weight reduction percentage among 261 women on the background of the achieved reduce of an increased appetite and hunger, as well as of the achieved saturation by aliment with lower caloricity and lower volume.

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The comparison has been carried out in two groups: first - patients who had gotten four séances of microacupuncture, and second - patients who had gotten four séances of microacupuncture together with ten séances of corporal acupuncture.

All patients were recommended to press the micro needles during the first, second and third expositions, hereby it was strongly recommended to press them in two parallel regimes, namely – each hour when wakeful and any time as soon as the patient is hungry. The pressing must be concise, quick – up to algesis. It was recommended to decrease the caloricity and the volume of the food, but not lower than 800 kcal daily. All patients were recommended to analyze the food accurately accordingly the taste and to abide by the rules of etiquette when eating.

It was shown that the use of the described method of acupuncture allows to achieve an individual forming of the system of control of body weight, hunger and a feeling of fullness.

Four groups who got the maximal effect (that is who lost more weight) from this method of acupuncture, include: a) women of reproductive age; b) women who had increased the weigh earlier because of accouchement and breastfeeding; c) women who got séances of microacupuncture together with séances of corporal acupuncture; and d) patients who have been pressing the needles accurately.

**Conclusions:** The acupuncture method that is carried out during 1-1.5 months allows to decrease weight body rather comfortably for patient as well as to form a prolonged stable relaxed attitude to eating.

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## ACUPUNCTURE MEETS VETS

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### ***Veterinary acupuncture: Big animal, but rapid responses - elephant*** **S.K.H. Aung**

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President of the World Natural Medicine Foundation

**Purpose:** Veterinary acupuncture differs from human acupuncture on emotional and spiritual levels. Human beings are more complex and emotional, whereas veterinary cases are more naturalistic. All of the meridians are the same between humans and animals, with twelve regular meridians, and eight extraordinary meridians, and almost the same number of acupoints in each meridian. Humans as upright animals have meridians which run longitudinally up and down their bodies, whereas veterinary meridians arch laterally throughout the animals' four limbs.

**Relevance:** The most important animal meridians are the Conception and Governor vessels, which extend beyond the length of human meridians along the animals' tail. Tails are vitally important for treating the majority of conditions in animals. Animals' acupuncture points are significantly larger than humans'. Acupoints and meridians can be easily detected by anatomical landmarks, or by intuition/feeling. Chakra points such as Mingmen (GV4), and Baihui (GV20) are particularly noticeable.

**Participants:** Elephants have very unusual meridians, because of their trunks, tusks, and large ears. The trunk is itself a microsystem centre, along with an elephant's tail and ears, and is directly connected to an elephant's brain. The tail, as well as its left and right attachments to the rear of the elephant, is an essential region for treating lower back pain, producing vital energetic

alignment for the elephant, and, at the same time, balancing the energy flow within its body.

**Methods:** One of the difficulties in treating elephants is their enormous size; it is necessary to have a ladder to reach all of the elephant's important acupuncture points. Another difficulty is the thickness of skin, requiring a small chisel and wooden hammer to make an entryway for needles in between the layers of epidermis. The needles themselves are usually one and one half feet in length, and much thicker in diameter than usual.

**Analysis:** Lucy the Asian elephant in the Valley Zoo of Edmonton suffered from right sciatica pain. She lacked exercise as a result, and gained weight, increasing her pain. Animals respond very well to acupuncture, because their energy is pure, and moreover, they have less emotional complexity and pollution. It is important in treating any veterinary patient that you elicit their consent, given through eye signals, because it is not possible to successfully treat any animal without their agreement. Lucy was treated with acupuncture to Mingmen (GV4), Baihui (GV20), Shenshu (BL23), and Huantiao (GB30) on the right side of her tail's attachment.

**Results:** After receiving three treatments, Lucy was able to walk without limping, and after six, she had completely recovered. At the present, Lucy has maintained excellent health since the time of her treatment.

**Conclusions:** Species of elephants can be quite different from each other, and Asian elephants are generally predisposed to intellectual artistry, as evinced by the two bulging frontal processes on their skulls. This species of elephant can even produce colourful paintings. Lucy's happiness at her recovery was expressed through a series of artistic works produced together with me for fundraising at the Valley Zoo.

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### ***Veterinary acupuncture: The most energetically sensitive animal - horse***

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**Purpose:** The purpose of this presentation is to demonstrate the efficacy of veterinary acupuncture for horses, sharing knowledge and experience with all acupuncture practitioners who would like to perform this therapy as part of their practice.

**Relevance:** Horses, like humans, have physical, mental, and spiritual problems. Physically, they experience both painful and non-painful conditions. Painful conditions include concussion, traumatic injury, and symptoms of long-term medical illness. Non-painful conditions include disorders of the lung, gastrointestinal tract, and circulatory system. Horses also experience mental disorders, especially if mistreated by humans, leading to depression, anger, and anxiety. Well treated horses, on the other hand, are happy spirits, who can have a healing effect on themselves and humans, including those who are sick, disabled, or weak.

**Participants:** The author has performed acupuncture at an equine center in Edmonton, Alberta, Canada for over twenty five years. He has treated more than one hundred horses, with different physical, mental, and emotional syndromes. There are a number of ways to differentiate between physical and mental problems in horses. Horses' eyes rolling upwards indicate fearfulness, while eyes rolling sideways indicate a lack of confidence. The ear is another important signal for horses' mental stability, as are the ways that they breathe and stand, and how they mingle with human visitors.

**Methods:** Horse acupuncture employs 3 inch needles with a 28 gauge.

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One of the important acupuncture points for horses is EXHN3, which helps horses to maintain good concentration. After initially needling EXHN3, GV4 can be employed for uplifting horses' spirits. GV4 controls the hind parts of the legs, whereas GV14 controls the front part of the legs. Since horses wear steel horseshoes, Kidney depletion is a concern. GV4 can be useful to energize the Kidney, while CV17 helps to move the Qi. It is also important to treat CV17, and the throat chakra CV22, to improve the horse's gait. A horse's tail plays a vital role in maintaining vital energetic alignment for horses that have experienced a history of unconsciousness, one-sided injuries, or motor vehicle collisions, and pulling of the tail is one technique to treat horses for quick recoveries.

**Analysis:** After treating many horses, I can see that veterinary acupuncture has important therapeutic value. It is fast, and gives balancing and harmonizing action.

**Results:** Horses respond very quickly to acupuncture, and are one of the most energetically sensitive animals. Acupuncture is also important because it is a long lasting therapy if the constitution of the patient is sound.

**Conclusions:** Wholistic approaches, with natural acupuncture treatment, can play a vital role in horse health, to improve the animals' general well-being and quality of life. Overall, acupuncture is very useful on treating horses, especially horses training for races and special occasions. It is also very helpful in uplifting the energy and spirit of the animals.

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### ***Experimental application of acupuncture in a turtle***

**P. Papaioannou, S. Harlaftis**

Department of exotic animals, Papaioannou Veterinary Clinic

**Purpose:** The use of acupuncture in land turtle with weakness and inability to move and support of hindlimbs because she was injured by a car in the

2nd of 2011.

**Treatment:** Disinfection of the wound, use of antibiotics-inflammatory and analgesic drugs, for 15 days.

Then by using glue we succeed the convergence of the broken shell and for 2 months the turtle was with plaster bandages. As a result of this treatment the animal had difficulty of walking and support. Able to use only the front legs.

**Acupuncture and Results of Acupuncture Treatment:** For 4 months needles were placed on a daily basis in liv 3 point and finally we placed an implant cut-gut in liv 3 point. We had the first positive results after 20 days of treatment. At the end of the 3rd month the turtle was able to walk, so we decided to put the implant.

**Final Results:** The turtle after 5 months is able to walk normally.

## **ACUPUNCTURE MEETS STATISTICS**

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### ***Acupuncture for inpatients in general hospitals – A road map***

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**Purpose:** few general hospitals offer acupuncture and the scientific literature that describes this specific activity is practically nonexistent. This paper presents the particularities to offer acupuncture to inpatients.

**Relevance:** Most preparatory courses of acupuncture don't consider the fundamental difference between inpatients and outpatients. Professionals don't have many opportunities to learn about it. We present the 6 years

experience treating inpatients at Hospital Israelita Albert Einstein (HIAE).

**Participants:** HIAE offers acupuncture to inpatients since October 2005. Our institution is a private tertiary general located in S. Paulo (Brazil). It's one of most respected healthcare organizations in Latin America.

**Methods:** Hospital directory must design the scope of service, including the decision to offer acupuncture as isolated therapy versus to offer complete traditional Chinese medicine. Rules about the competency to practice acupuncture must be established. Expected Difficulties include underutilization of acupuncture, complexity for reimbursement, conflicts of communication (terms of the Chinese traditional medicine), professional staff may have divergences about Acupuncture. Treatment may be not completed as planned because of the dynamic of a hospital routine, such as the appearance of clinical intercurrents, and patient discharge with clinical stabilization.

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**Analysis:** We have observed that acupuncture given to inpatients at the hospital differs in several ways from that given to outpatients. Below are summarized the main particularities of inpatients that impact in acupuncture treatment:

- Patients tend to have more severe and acute conditions
- There is stress by the environment and non usual procedures
- Tend to worst clinical condition, consciousness level, comorbidities
- Patient with reduced mobility, electrodes, bandages, catheters
- There is necessity for more immediate results
- Presence of family and caregivers, with lack of privacy and tranquility
- Daily based attendance that may need weekend shifts
- Less time for the session, which compete with other treatments

**Results:** Based on our experience, we bring suggestions of attitudes of the practitioner to contour these obstacles:

- Therapeutic approach has to be more utilitarian on symptom relief
- More vigorous techniques due to severe intensity of target symptoms
- Versatile and flexible approach and point selection
- Techniques such moxibustion are unfeasible
- Hospital asepsis standards are more rigorous than in clinic

- Higher costs since therapist dedicates attention to one patient at a time
- Doctor–patient relationship focused objectively, within scientific context
- Greater attention to ergonomic aspects of practitioner

**Conclusions:** Introduction of acupuncture for inpatients in general hospitals must pay attention to the particularities of this population and the predictable treats associated to this service. We hope the description of the experience of our institution may encourage other hospitals to develop an acupuncture service.

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***Traditional korean medicine practitioners' awareness of and demands for the case report***

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**Objectives:** The purpose of this study is to assess traditional Korean medicine (TKM) practitioners' awareness of and demands for the case report, based on the opinion that careful observation on the case sometimes provides us with the important information as clinical trial especially in the traditional medicine research field.

**Design:** A questionnaire study of TKM practitioners

**Setting:** TKM practitioners who participated in the annual continuous maintenance education held at 5 regions of the Republic of Korea.

**Subjects:** 236 TKM practitioners

**Outcome measures:** TKM practitioners' awareness of case reports(e.g., experience in reading case reports); intention to report case; disease group that requires case report for reference to one's practice.

**Results:** Almost 60% of the respondents had read case reports published in medical journals and 67% had openly shared their clinical cases with

their colleagues, and nevertheless, a mere 36% of the respondents had actually referred to case reports for their clinical decision-making. Of the respondents, 18.6% had been educated on reporting cases, and only 16% had the experience of reporting cases on one's own. However, 32.6% of the respondents had the intention to report cases in the future. These results, excluding the results of openly sharing cases, show significant differences between general physicians who holds a license but no hospital training experience and board certified TKM doctors who has training experience.

Respondents demanded case reports on the following disease groups listed in priority; musculoskeletal disease, gastrointestinal disease and neuropsychiatric disease, endocrine disease, gynecological disease.

**Conclusions:** A majority of TKM practitioners have read or shared case reports but holds little experience of actually having reported a case report or have been properly trained. Through this research, it has been found that awareness of case reports is rising in hospital training. Thus, the objective of case report education for TKM practitioners who have hospital training experience should be set on encouraging them to do more whereas for general physicians, the objective should be set on making them more exposed to case reports to heighten one's awareness. Furthermore, as more case reports are conducted on disease groups as musculoskeletal disease, gastrointestinal disease and neuropsychiatric disease, areas where case reports are greatly required from TKM practitioners, interest will be raised as well.

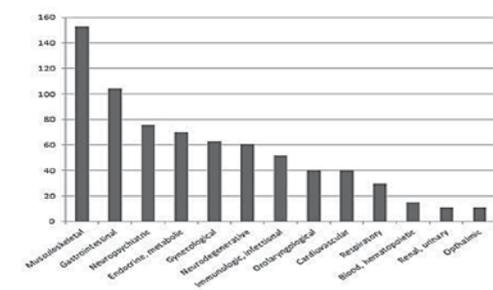


Fig. 1. Case Report Requiring Disease Group

Table 1. Characteristics of Respondents

Category	Respondents (Number)	Proportion (%)
Clinical experience	Under 5 years	45 (19.5)
	5-10 years	57 (38.9)
	10-15 years	51 (21.8)
	15-20 years	29 (11.8)
Over 20 years	24 (10.2)	
Hospital training experience	No	179 (75.9)
	In training	25 (10.6)
	Board certified	25 (13.5)
Education	Bachelor	134 (56.8)
	In Master	12 (5.1)
	Master	32 (13.6)
	In Doctoral	10 (4.2)
	Ph. D	48 (20.3)
Working type	Clinic (owned)	190 (80.5)
	Clinic (employee)	11 (4.7)
	University traditional medicine hospital	4 (1.7)
	Other types of traditional medicine hospital	9 (3.8)
	others	22 (9.3)

Table 2. Case Report Awareness and Experience

Category	Total (N=258)	General Physicians (N=178)	Have Trained (N=87)	P-value
I have read a formal case report:				
Yes	140 (59.3)	94 (52.5)	46 (52.7)	P<0.001
No	96 (40.6)	86 (47.4)	13 (18.3)	
I have referred to case reports for clinical decision-making:				
Yes	55 (29.0)	54 (30.3)	31 (34.9)	P<0.001
No	151 (60.9)	124 (69.6)	28 (35.1)	
I have openly shared cases with colleagues:				
Yes	158 (69.9)	114 (63.8)	44 (50.3)	P<0.001
No	78 (30.0)	64 (36.1)	19 (21.6)	
I have reported clinical cases:				
Yes	58 (26.1)	15 (7.2)	28 (32.0)	P<0.001
No	198 (83.9)	163 (92.7)	33 (37.6)	
I have participated in case report education:				
Yes	44 (20.4)	10 (5.6)	28 (32.0)	P<0.001
No	192 (81.6)	168 (94.3)	33 (37.6)	
I have the intention to report cases in the future:				
Yes	77 (29.8)	48 (27.0)	28 (32.0)	P<0.002
No	158 (61.2)	130 (72.9)	28 (32.0)	

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### Acupuncture for treating dry eye

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**Purpose:** To evaluate the effectiveness and safety of acupuncture on ocular symptoms, tear film stability and tear secretion in dry-eye patients.

**Design:** A randomized, patient-assessor blinded, sham-acupuncture controlled trial.

**Participants and methods:** Forty-two participants with defined moderate to severe dry eye had acupuncture treatment three times a week during three weeks. Seventeen standard points (GV23; bilateral BL2, GB4, TE23, Ex1, ST1 and GB20; and unilateral SP3, LU9, LU10 and HT8 on the left for men and right

for women) with “de qi” manipulation for the verum acupuncture group and seventeen sham points with shallow penetration without other manipulation for the sham group were applied during the acupuncture treatment. Differences were measured in the ocular surface disease index (OSDI), the visual analogue scale (VAS) of ocular discomfort, the tear film break-up time (BUT), and the Schimer I test. In addition, adverse events were recorded.

**Results:** There were no statistically significant differences in the changes in the OSDI, VAS, BUT, Schimer I test values and general assessments from baseline between the verum and sham acupuncture groups. However, the results of the within-group analysis showed that the OSDI and VAS in both groups and the BUT in the verum acupuncture group were significantly improved after three weeks of treatment. No adverse events were reported during this trial.

**Conclusion:** According to the findings of this study, further research, with an appropriate design of the control regimen to demonstrate effectiveness, is needed to establish the effect of acupuncture treatment on dry eye.

**Acknowledgement:** This study was supported by the Development of Acupuncture, Moxibustion and Meridian Standard Health Technology Project (K10010) of the Korea Institute of Oriental Medicine.

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**Review of acupuncture treatment for hypertension in clinical trials**

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**Objective:** This study aims to evaluate clinical trials of acupuncture treatment for hypertension and to assess their methodology and results.

**Methods:** Eight Korean databases and four international databases were searched for acupuncture treatment for hypertension clinical trial until June 2011. Study quality was assessed using the risk of bias(ROB) tool.

**Results:** Twenty-four trials of acupuncture for hypertension were included. There were 14 randomized, 1 non-randomized controlled trials and 9 before-after study. The most frequently used acupuncture point were **zúsānlǐ** (ST36), **qūchí** (LI11), **fēngchí** (GB20), **sānyīnjiāo** (SP06), **sānjiān** (LI03) and **hégǔ** (LI04). In more than half of studies, needle retention time was 20~30 minutes. Compare to baseline, change of blood pressure after treatment was significant in all studies. However, the results of effect on blood pressure between acupuncture and controlled were not consistent.

**Conclusions:** There is insufficient evidence to suggest that acupuncture is an effective treatment for hypertension. Further well-designed clinical trials will be required to evaluate the effects and safety of acupuncture treatment for hypertension.

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**Effect of acupuncture on the treatment of subfertile men**

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**Aim of study:** To evaluate the efficacy of acupuncture treatment on subfertile men.

**Methods:** In this study, the Traditional Chinese Medicine (TCM) consultation, diagnosis, and acupuncture treatments were performed by trained acupuncturists in two different hospitals. Participants underwent 20 sessions

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of acupuncture treatment, twice a week, over a period of 10 weeks. Selected acupuncture points included Baihui, qihai, Guilai, Shenshu, Ciliao, Zusanli, Sanyinjiao, Taixi, and Taichong, retain the needles for 30min. Acupuncture Treatment Observation Forms were filled by patients to compare the differences between pre-treatment, during the 10th and 20th acupuncture session, and 5 and 10 weeks after the last acupuncture session. Sperm-Hyaluronan Binding Assay (HBA) was performed on semen samples to determine the sperm fertilizing ability. Semen samples were obtained from each subject for analysis at various time points. Two semen analyses were performed for pre-treatment. During treatment, semen samples were tested after the 10th and 20th acupuncture treatment session. Post-treatment samples were tested 5 and 10 weeks after the last acupuncture session. Due to the nature of intra and inter-man variability in semen parameters, average of the 2 HBA scores for sperm fertilizing ability comparison were used for pre-treatment, during treatment, and post-treatment measurement.

**Results:** 15 participants were recruited for the acupuncture treatment since July 2009. With some drop-outs, to date, 7 subjects have completed the clinical trial. According to the TCM diagnosis, 6 out of the 7 patients belong to kidney-yin deficiency, with one of them also having liver yin deficiency, and one belong to kidney yang deficiency. 4 patients' depression improved and 5 felt fresh and not easily tired. Out of the 6 patients who complained of lower backache, all experienced a decrease in frequency of pain, while 5 also experienced reduced pain score, out of which 3 had complete resolution of pain after the 20 sessions.

Comparing the average HBA mean scores, overall there was a noticeable significant ( $p < 0.001$ ) linear improvement in the sperm fertilizing ability over time. The HBA scores improved from 8% to 11% at treatment and to 14% at post treatment. Within subjects, there was also a slight improvement in sperm fertilizing ability during treatment, but this was not significant ( $p = 0.059$ ) when compared to pre-treatment. The post-treatment sperm fertilizing ability within subjects was found to have significant improvement ( $p < 0.001$ ) when compared to pre-treatment.

**Conclusion:** In this pilot study of a small group of subfertile men undergoing acupuncture treatment, there was a significant improvement in lower backache and 50% of the patients felt fresh and energetic during the treatment. There was a significant linear increase of sperm fertilizing ability from pre-treatment to post-treatment. This proved that the functions of the kidneys in storing essence and dominating development and reproduction. In other words, the ability to reproduce, grow, and develop is related to the prosperity or decline of the essence qi of the kidney.

**Acknowledgements:**

This study was funded by SingHealth Foundation – Traditional Chinese Medicine research grant, SHF/TCM003/2008.

This study was approved by the SingHealth Centralised Institutional Review Board, SHS IRB 2009/594/D

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***Saam acupuncture for functional dyspepsia: An ongoing randomized, controlled pilot clinical trial protocol***

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**Purpose:** The aim of this study is to evaluate feasibility for massive clinical research and make basic analysis of efficacy, safety and cost-effectiveness of SAAM acupuncture on functional dyspepsia (FD).

**Relevance:** FD is a common gastrointestinal disorder, and its symptoms, including epigastric pain or burning, early satiation and postprandial fullness, significantly affect patient's quality of life and increase an economic burden on society. SAAM acupuncture, a form of traditional Korea acupuncture (TKA), is frequently used to treat gastrointestinal diseases, and simultaneously modulates other relative channels, which are selected based on the theory of

nourishing or suppressing cycle relationships, to ensure whole-body balance.

**Participants:** We will include patients diagnosed with functional dyspepsia pursuant to ROME III criteria; aged 20 to 65; with moderate to severe chronic dyspepsia during last 6 months. Participants will be excluded if they have had a gastrointestinal surgery; usage of a medication like proton pump inhibitors, H2-receptor antagonist, corticosteroids, non-steroidal anti-inflammatory drugs or oriental medical treatment during last 4 weeks.

**Methods:** 40 participants will be recruited, and randomly allocated into two groups. Acupuncture group will receive SAAM acupuncture(individualized acupuncture according to the differential diagnosis of TKM) three times per week during four weeks. Usual care group will not receive acupuncture during study period. Both groups will be allowed to use any kind of treatment including over-the-counter drugs, conventional medication and other active treatments. Education material for explaining on FD and current management options will be provided in each group. Gastrointestinal symptom(GIS) score, functional dyspepsia-related quality of life(FD-QOL) scale, numeric rating scale(NRS), patient global assessment and EuroQoL-5Dimension(EQ-5D) will be assessed. Safety will be assessed at every visit.

**Analysis:** Statistical analysis will be conducted with a 95% CI using SAS. For analysis of baseline characteristics, either two-sample t tests or Wilcoxon rank sum tests for continuous data and Chi-squared tests or Fisher's exact tests for categorical data will be conducted after the test for normality. ANCOVA will be used to test whether outcome measures differ between conditions when controlling for baseline and other covariates. Also, repeated-measures ANOVA will be performed to show changes in trends.

**Results:** This protocol was registered at CRIS registry (KCT0000164). Currently, 14 participants were enrolled in the study and the remaining participants' recruiting is in progress. Data will be analyzed before and after treatment, and at 4-week/8-week of f/u after the end of treatment according to the method described in the protocol. Cost-effectiveness will be analysed using the GIS score and EQ-5D comparing the cost of acupuncture with usual care during the four-week treatment period and the follow-up period.

**Conclusions:** The results of the trial will provide basis for the efficacy, safety and cost-effectiveness of acupuncture for FD.

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***National Curriculum of physicians in the specialty "Reflexology" in the Russian Federation***

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Following the order of the Ministry of Health of the USSR, starting from March 1, 1956 in our country, the Department of reflexology and manipulation of the Russian Medical Academy of Postgraduate Education started training doctors in the specialty of reflexology, and from March 1987 started training in manual therapy.

Initially the program was provided for working physicians in absentia (part time), and full time (6 months - in absentia and 3 months - full time). After signing the Bologna convention with Russia, this was changed to 4-month initial training, 576 hours.

Every 5 years the doctors had to be trained in their specialty (144 hours), and pass a certification exam. In addition to self-study were possible also short-term thematic courses. Education in clinical internship lasts 2 years in graduate level and for doctoral - 3-4 years. In December 12, 2007, by order of the Health Ministry of Russian Federation, in the range of medical specialties introduced two new specialty doctor and the doctor-reflexologist and chiropractor. This order was preceded by a large amount of scientific, methodological, paedagogical and practical activities of the department of training - for teachers of Advanced Medical Institutes in the USSR and

Russia, as well as practicing physicians, residents, graduate students, doctoral students, interns from our country and foreign countries. The clinical base of the chair is Clinical Hospital Botkin, with 30 000 beds, where students have their practice (70-80% of instructional time). Over the years, 256 000 patients were treated, with an efficiency of 60 to 90%. The program includes acupuncture with theoretical training on the basis of modern achievements in basic science evidence (structural-functional theory of reflexology, defining the role of normal and pathological functional systems, the dynamics of power and adaptive systems of the body, defining the role of endorphins and encephalins, inflammation, tissue regeneration, nervous system and other systems. In total the department has trained about 15 000 doctors.

Due to national scientists: B.M. Sechenov, H.I. Bekhterev, П.К. Graschenkova, B.Г. Anokhin, M.Д. Vogralik, M.K. Kovrigina, MK Usovoi, H.A. Whiskers and others, as well as foreign scholars Zhu Liang, N. Nikolaev Sato Okabe, H. Ikonopulyus, H. Markopulos, M. Theocharopoulo, T. Theodoratou, F. Beyens and many others we have been able to develop a science-based, and put into practice the learning process not only the classic Chinese method of acupuncture, but also create new original diagnosis, treatment and prevention - electroreflexotherapy, microreflexotherapy, laser reflexotherapy, cryo- magneto- meso-therapy and other methods

Especially popular among patients with chronic diseases mikroigloreflexotherapy uses for which an impact on the point (zone) of acupuncture is carried out continuously (1, 2, 3 weeks).

This method of prolonged reflex is essential for the treatment of acute, subacute, and chronic diseases. In recent years, staff of the department developed and introduced new methods of diagnosis, prevention and treatment of cerebrovascular disorders caused vertebragenic causes pain syndromes caused by dorsopathies using biofeedback vertebral thoracalgia. In Russia, for 56 years, has been established a state reflexotherapy service that can assist people to date in any region of the country.

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### ***Acupuncture treatment in refractory post traumatic brain injury (TBI) headache in adults. Three to 26 months follow-up in a trauma center: Prospective preliminary experience***

#### **F.B Bates**

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**Purpose:** To assess the effectiveness of acupuncture on the management of refractory chronic headache as sequel in severe post-traumatic brain injured patients.

**Relevance:** Post TBI headache is a frequent, invalidating and difficult to treat sequel in otherwise healthy adults. Effective and safe treatments, with few side effects are needed, especially in this active working population group.

**Participants - Methods:** Since 2008, 63 patients suffering of chronic post-TBI headache have received standard medical management at our hospital. Of these, 11 patients did not respond and were referred to our Pain Management Unit.

#### **General Inclusion Criteria:**

- a) Self-reliant patients recovered from Severe Post-Traumatic Brain Injury (TBI) suffering of intense and permanent headache lasting more than 6 months.
- b) No surgical, medical, neuropsychiatric condition or drug addiction pending management.
- c) No medico legal issues pending.
- d) Ineffective pharmacological management, or intolerable side effects of drugs determined by the referring neurologist.

Five patients were excluded (One tetraplegic, 2 untreated psychiatric disease, 1 opioid addiction, 1 severe organic brain damage). All other 6 patients meeting inclusion criteria had less than 20% improvement of their basal pain score with standard medical management. The visual analog pain score (VAS) before beginning acupuncture treatment was 7 or more. The frequency of

pain was daily. Acupuncture protocols started twice a week. Combination of acupuncture points were selected according to TCM diagnosis in each patient individually.

**Primary therapeutic outcomes:** a) Reduction in pain intensity (VAS scale: initial, final, % of reduction). b) Frequency of headaches. Secondary therapeutic outcomes: Number of prescribed pain medications before/after treatment.

**Analysis - Results:** All 6 adult patients selected for treatment had a decrease in pain intensity (VAS score), but in variable degrees. Two had 100% relief. The rest had 67%, 63%, 57% and 29% decrease. The frequency of headaches also decreased in all patients. One patient became pain free. The rest all have less than 3 episodes x week. In 4 patients analgesics were reduced during this period. Follow up of acupuncture treatment ranges from 3 to 26 months. The overall variations observed at 3 months were: Pain intensity (average VAS) 7.33 to 3.5 (52%); pain frequency (days x week) 7 to 2.67. The overall variations observed at 6 months were: Pain intensity (average VAS) 7.33 to 4 (47%); pain frequency (days x week) 7 to 2.25. No adverse effects related to acupuncture were observed during this study period.

**Conclusions:** The results of this prospective case series experience favours acupuncture treatment for pain in refractory post-TBI headache as management option. All patients had positive but variable responses to acupuncture despite being non-respondent to standard medical management. Larger populations must be studied to statistically validate or reject these observations. Longer follow-up periods are also necessary to determine the pattern of pain remission or chronicity using acupuncture in these patients.



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