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Doctors	





# **Welcome by Dr David Mitchell**

### **Federal President Australian Medical Acupuncture College**

On behalf of the Australian Medical Acupuncture College, I am delighted to welcome you to ICMART XI World Medical Acupuncture Congress, Sydney 2004.

Since 1973 AMAC has been at the forefront of acupuncture education and training for medical practitioners in Australia. It seemed a logical follow-on to build this year's ICMART conference

around Acupuncture "Education, Research & Practice". Whilst the web, videos, tapes and books are now part of our learning processes, the tyranny of distance has meant that many Australian acunpuncturists have not had face to face contact with acupuncturists from overseas and vice versa. Your attendance at ICMART Sydney 2004 is a sign that things are changing.

We acknowledge the commitment, dedication and financial investment of overseas delegates. We are privileged that the international collegiality of ICMART has brought your expertise, wisdom and experiences to our shores.

Our sub theme of "Come see, come learn, come share" is an integral part of this expanding learning experience. On a one-to-one basis, between sessions, in small groups and round table discussions, and in workshops, we hope you will both give and receive, thus adding to the total acupuncture knowledge-base for all of us. And that's even before we get to Aussie hospitality in the social calendar – fun, food and fine wines provide a balance to the rigors of learning, for it is said "a relaxed mind is a receptive mind".

Thank you for coming to Sydney and thank you for contributing to ICMART's increasing relevance in the world of medical acupuncture.



### **Australian Medical Association Limited**

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Website: http://www.ama.com.au/

President: Dr William Glasson Secretary General: Dr E. Robyn Mason



1 October 2004

### Dear Congress Delegate

I am delighted to welcome you to Sydney, Australia for the International Council of Medical Acupuncture and Related Techniques XI World Congress.

Acupuncture is now a well established part of medical practice in Australia with the techniques being widely accepted within mainstream medicine. Over 3000 General Practitioners in Australia use acupuncture in their practices.

This congress brings together leaders in the field of acupuncture from around the globe and promises to be an informative and memorable event.

On behalf of the AMA, I warmly welcome you to the Congress and to Australia and wish each delegate a very successful conference.

Yours sincerely

Rul Glasson

Dr Bill Glasson President

AMA

#### SYDNEY CONFERENCE - AMAC/ICMART OCTOBER 2004



### Welcome by Baron Beyens, M.D.

### **General Secretary of ICMART**

Through the diligent and efficient work of the Australian College of Medical Acupuncture, I have the pleasure to welcome you to the ICMART XI World Medical Acupuncture Congress in Sydney.

Congresses are always very significant of the health of an association. I am quite sure that this exceptional Congress will prove it again. It is a good opportunity to show the active presence of

international medical acupuncture in this part of the world. It is also a rare opportunity for many medical acupuncturists of Down under to meet and listen to colleagues from all over the world.

There will be plenary lectures by international speakers, workshops, free communications and poster sessions for learning. On top of that quite a few social happenings to allow for meeting, discussing, exchanging, laughing and having a good time together, which is the second main object of a congress!

The World of Medical Acupuncture is slowly finding its path, its momentum, its direction. Of course a lot remains to be done but we trust the representatives of each association to help us in whatever way they can to improve our activities and our presence in all parts of the world. More and more associations are joining ICMART, which is a sign that they appreciate what the ICMART team has been doing and they want to be part of the international happening of medical acupuncture.

I wish to all the participants an exciting congress.

### Welcome by Bryan L. Frank, M.D.

# Vice-President (2002-2004)- International Council of Medical Acupuncture and Related Techniques (ICMART) President (1999-2001)- American Academy of Medical Acupuncture (AAMA)

Sydney promises to be a special time for all of us at the XI ICMART World Medical Acupuncture Congress. Past friendships to be rekindled, new friends to be made, affirmation of ancient or more current wisdom, exploration of new horizons, and challenges to address- these are the essence of a great ICMART experience!

I trust these past months since ICMART in Brazil have given you opportunities to enjoy fresh success with your patients along with questions and searching for new insights and understandings in acupuncture and related techniques.

I wish to extend my sincerest appreciation to the Australian Medical Acupuncture College, Dr. Chin Chan, ICMART 2004 Convener, the beautiful city of Sydney, the ICMART Board and Bureau, and most of all YOU, for the success we will enjoy.

As we move toward ICMART 2005 in Prague, Czech Republic, may this time in Sydney refresh you, stimulate you, and enrich your lives and your practices.





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SYDNEY CONFEDENCE - AMAC/ICMART OCTOBER 2004

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	BALLROOM 1	BALLROOM	12
8.30-9.15	OPENING CEREMONY		
9.15-10.00	<b>Dr M Butler:</b> "The scientific basis of acupuncture analgesia with emphasis on neurochemical aspects." Chairman:		
10.00-10.30	Morning Tea		
10.30-11.15	Prof Cho: "New Approaches to Study of Acupuncture Mechanisms Neuro-imaging using Functional MRI&PET. Chairman:		
11.15-12.00	<b>Dr J Filshie:</b> Safety Aspects of Acupuncture for Palliative. Care Chairman:		
12.00-12.30	<b>Dr I Relf:</b> Cochrane Review has missed the point with acupuncture trials in LBP.		
12.30-1.30	Lunch		
1.30-2.30	<b>Dr M Butler:</b> "Recent research on the neurobiology and psychology of the placebo effect."		
2.30-3.00	Dr Roberta Chow: The effect of 830nm laser on rat dorsal root	2.30-3.15	<b>Dr S Aung:</b> Traditional Chinese Medical Diagnosis
3.00-3.15	Ganglia: implications for laser acupuncture  Afternoon Tea	3.15-3.30	Afternoon Tea
3.15-4.00	Dr B Frank: A Critical Assessment of Functional Ear Points		
4.00-4.45	<b>Dr Shang:</b> Acupuncture research from observation to prediction		
	Cocktail Function		

## CAMBRIDGE ROOMS 3 &4

10.40-11.00	J Nepp: Acupuncture and Psychotherapy in Blepharospasm
11.00-11.20	<b>Dr Michael Weber:</b> The New Laser-Needle-Acupuncture In Clinical Application
11.20-11.40	<b>Dr Hans Kjerkegaard:</b> Gold-Implantation.A New Method For Treating Chronic Arthritic Pain.
11.40-12.00	<b>Yong-Hyeon Baek:</b> The Study on the Analgesic Effect And Its Cholinergic Mechanism of Electroacupuncture in the Rat Model of Collagen-Induced Arthritis
12.00-12.30	J Nepp: Acupuncture And Dry Eyes Syndrome
12.30-1.30	Lunch
1.30-1.50	<b>Seong-Uk Park:</b> Chunghyul-Dan (Qingxie-Dan) Improves Arterial Stiffness In Patients with Increased Bapwy
1.50-2.10	<b>Ho-Jun Kim</b> : Effect of Bee Venom Injected Intraarticularly On Knee Osteoarthritis: A Comparative Study With Saline Injection
2.10- 2.30	Franz Daling: Nocipathy And Acupuncture: A Pilot Study On Patients With Lower Back Pain
2.30-2.50	<b>Hou Youhong:</b> Clinical Effect of Acupuncture Combined with Multiple Laser Acupoint Needling on Arthralgia And Neuralgia of the Elders with Chronic Problems
3.00-3.15	Afternoon Tea
3.15-3.40	<b>Dr Chris K. Chin M.B., B.S., (W.A.) F.A.M.A.C.:</b> The C.H.R.I.S. Theory On The Aetiology And Perpetuation Of Back Pain Pt 1
3.40-4.00	<b>Dr. Heinrich Everke:</b> Acupuncture with Extra-corporal Shockwaves
4.00-4.20	<b>Dr Edward Butterworth:</b> The management of postural problems using Healthmarque reflex Orthotics
4.20-5.00	<b>Dr N Zubova:</b> Acup in Oncology



	BALLROOM 1	BALLROOM	
8.30-9.30	<b>Prof J S Han:</b> Frequency as the cardinal factor of the effectiveness of electroacupuncture: pain and drug addiction.		
9.30-10.30	<b>Prof T Lundeberg:</b> Effects of acupuncture in insomnia, anxiety and pain. Chairman:		
10.30-10.45	Morning Tea		
10.45-11.30	<b>Dr J Filshie:</b> Acupuncture for Pain and symptom control in Breast cancer patients. Chairman:		
11.30-12.15	<b>Prof J S Han:</b> Acupuncture responders and non-responders: Neurochemical mechanisms. Chairman:		
12.15- 1.00	<b>Dr W Maric Oehler:</b> Presentation of results of infrared camera use with acupuncture.		
1.00-2.00	Lunch		
2.00-3.30	Back pain 5pph		
		1.30-2.30	<b>Prof Cho:</b> "Neural Substrates of Acupuncture - From Anatomy to Neuro-Molecularbiology"
		2.30-3.15	<b>Dr Lisa Schlunzen:</b> Acupuncture of LI4 in anaesthetised healthy human causes decreased cerebral blood flow in Putamen measured by PET Chairman:
3.30-3.45	Afternoon Tea	3.30-3.45	Afternoon Tea
3.45-5.00	Back Pain 5pph	3.45-4.15	<b>Dr Hammes:</b> Neuro-imaging Chairman:
		4.15-5.00	Prof Cho: Neurophysiological and molecular bases of acupuncture mechanisms - Study of BS-HPA axis based acupuncture mechanism using neuro-imaging techniques"

CAMBRIDG	E ROOMS 3 & 4	ESSEX ROOM
3.30-10.00	Education Chapter meeting: Marshall Sager: Chair François Beyens Walburg Maric-Oehler Helmuth Liertzer Gilbert Lambrecht Jacqueline Filshie Mike Cummings	
11.00-11.30	<b>Petr Fiala:</b> Acupuncture Treatment of Cerebral Palsy and Speech Disorders	
11.30-12.00	<b>E. Brauneis:</b> Scalp Acupuncture in the Treament of Dyslexia and Dysgraphia	
12.00-12-30	<b>Biljana Vukovic-Jankovic MD:</b> Possibilty of Treating Stroke Patients By Applying Soft Laser And Functional Electrical Stimulation (Fes)	
12.30-1.00	<b>Dr Hegyi Gabriella:</b> Acupuncture, as New Aspect of Biophysics	
1.00-2.00	General Assembly	
1.00-2.00	Lunch	1.00-2.00 General Assembly
2.00-2.30	<b>G. Garofano:</b> Symptomatic Treatment of Rheumatoid Arthritis: Further Studies on the Long-Term Effectiveness of Acupuncture	
2.30-3.00	<b>Lee Seung-Deok:</b> Increased Cervical Lordosis After Deep Acupuncture in Patients with Neck Pain: Nonrandomized Clinical Control Trial.	
3.00-3.20	<b>Choi, In-Hwa:</b> The Effect of Saingheylyunbooemgami Extract to Recover Function of Stratum Coreum on Mice Model After Atopic Dermatitis Elicitation	
3.30-3.45	Afternoon Tea	
3.00-4.30	<b>M. Cucci:</b> Cephalea: Confirmation of The Effectiveness of the Integration Between the Occidental Medicine and the TCM Approaches	
<b>1.30-5.00</b>	<b>Vladimir Wolfson:</b> The Puzzle Of Acupuncture	



	BALLROOM 1	BALLROOM	12
8.30-9.15	<b>Dr R Chow:</b> RCT of Low Level Laser in Chronic Neck Pain. Chairman:		
9.15-10.00	<b>Prof T Lundeberg:</b> Acupuncture and EBM. Chairman:		
10.00-10.30	<b>Dr H Liertzer:</b> Anatomic structure analysis of acupuncture points.		
10.30-10.45	Morning tea		
11.45-11.30	<b>Dr Francois Beyens:</b> Acupuncture and functional disorders — A preliminary approach. Chairman:		
11.45-12.30	<b>Dr S Aung:</b> Clinical use of Acupuncture in Oncology. Chairman:		
12.30-1.30	Lunch		
1.30-2.45	Round tables		
2.45-3.30	<b>Dr P Soh:</b> The us e of Tendo-muscular meridian treatment in primary care	2.00-3.15	<b>Prof JS Han:</b> Questions, Answers and Demonstrations
3.30-3.45	Afternoon Tea	3.30-3.45	Afternoon Tea
3.45-4.15	<b>Dr D Lee Study:</b> Acupuncture management of frozen shoulder	3.45-4.15	<b>Dr. Kay Keng Khoo:</b> "Acupuncture for obesity"
4.15-4.55	<b>Dr Seong hyung Cho:</b> Effects of Myofascial Meridian Stimulation Therapy (MMST) on Shoulder Pain	4.15-5.00	<b>Dr B Frank</b> Workshop: Enhancing clinical outcomes in Auricular Therapy
7.00	Congress Dinner		

	BALLROOM 1
8.30-9.30	<b>Dr M Butler:</b> Workshop – "Central neural sensitisation disorders: a clinical concept come of age."
9.30-10.15	<b>Dr Kit Lau:</b> Acupuncture treatment of Endometriosis.
10.15-11.00	<b>Dr Chris Chin:</b> Theory of back pain Pt 2-3.
11.00-11.15	Morning Tea
11.15-12.00	Prague Presentation and Closing Ceremony.
12.30-1.00	Lunch

CAMBRIDG	CAMBRIDGE ROOMS 3 &4		ESSEX ROOM	
9.30-10.00	<b>Dr O Safonicheva:</b> Diagnostic and differential diagnostic of pathological processes stages.	9.00-10.30	<b>Dr Yamamoto:</b> Workshop: New Scalp Acupuncture	
10.00-10.30	<b>Dr Pesztenlehrer:</b> Acupuncture in allergic rhinitis			
10.30-10.45	Morning Tea	10.30-10.45	Morning Tea	
11.00-11.30	<b>Dr Murakozy:</b> Report of 1550 patients in a multi-centre trial of acupuncture	10.45-12.30	<b>Dr Yamamoto Workshop:</b> Workshop: New Scalp Acupuncture (Cont.)	
11.30-12.00	<b>Dr C Lee:</b> The missing link in Auriculotherapy & Homoeopathy			
12.00-12.30	Katrina Watson:	12.30-1.30	Lunch	
	Neuro-cellular, hypoglycia and depression & fatigue	1.30-3.30	<b>Dr Yamamoto Workshop:</b> Workshop: New Scalp Acupuncture (Cont.)	
		3.30-3.45	Afternoon Tea	
		3.45-5.00	<b>Dr Yamamoto Workshop:</b> Workshop: New Scalp Acupuncture (Cont.)	





# Psychiatry and Human Behavior, and Ophthalmology Planary talk abstract: Title "New Approaches to Study of Acupuncture Mechanisms - Neuroimaging using Functional Magnetic Resonance Imaging and Positron Emission Tomography"

#### Z. H. Cho, Ph.D

Professor, Radiological Sciences

Abstract: Last decades we have witnessed great advances in functional brain imaging (neuroimaging) especially with fMRI (functional Magnetic Resonance Imaging) and PET (Positron Emission Tomgography). These new tecchniques provide us invivo neurophysiology and neuro-molecular biological bases of the effect of many sensory stimuli including acupuncture stimulus.

We now have sufficient data to claim that acupuncture effect is indeed based on the neural stimulus via our central nervous system. Specifics of each acupuncture modality are, however, necessary to further substantiate modality specific disease treatment effect of acupuncture.

In addition, further study of molecular bases of the acupuncture mechanisms using PET are necessary to clarify the efficacy of acupuncture for various different disease treatment effects. Some of the preliminary results obtained for the pain and analgesic effect of acupuncture obtained with fMRI and PET will be presented and discussed.

Finally a generalized hypothesis of neurophysiological model of acupuncture mechanism based on a BS-HPA (Broad Sense Hypothalamus Pituitary Adrenal) axis will be discussed along with experimental evidences obatined with human and animal models.

Abstract : Recently developing neural basis of acupuncture using fMRI and PET began to shed light on understanding of millenia old acupuncture,

especially the neuromolecular bases of the mechanisms underlying the acupuncture treatment effect. We have accumulated a series of functional brain imaging based experimental data for several years since 1997 including some of the earlier results on study of visual cortical responses due to acupuncture stimulation. More recent studies, however,

suggest that the mechanism underlying the acupuncture treatment effect may be based on the generalized HPA

(Hypothalamus-Pituitary-Adrenal) axis reflex responses rather than the point specific effect which has been claimed by the classical acupuncture literatures. Our study, therefore, has been focused on the experimental studies of the effect of point specificity of acupuncture using functional brain imaging on human and molecular based study of animal for the finding of the possible correlation between the neural activation due to acupuncture stimulation and that of the BS-HPA (Broad Sense - Hypothalamus Pituitary Adrenal) axis hypothesis. Experimental results obtained by fMRI and PET on human subjects and in-situ hybridzation study of animal will be presented in conjunction with BS-HPA axis hypothesis.

# Plenary Talk II: Title "Neural Substrates of Acupuncture - From Anatomy to Neuro-Molecularbiology"

Abstract II: "Since the opening of the neural based study of acupuncture using functional brain imaging techniques of various kinds, researchers began to explore possible connection to the neuro-molecular biological effect of acupuncture mechanism, via human brain imaging as well as animal study. Among the intriguing findings, the point specificity and stimulation induced HPA (Hypothalamus Pituitary Adrenal) axis response hypothesis appear most revealing. In this talk, functional brain imaging based experimental results and neural substrates which are possibly involved in analgesic as well as other neurophysiological effects of acupuncture such as endocrine and autonomic reflexes will be discussed in conjunction with experimentally observed data."





# Pain and Symptom Control in Palliative Care: Principles of Treatment and Safety Aspects

### **Dr Jacqueline Filshie**

Consultant in Anaesthesia and Pain Management Royal Marsden Hospital, London and Surrey Secretary of the British Medical Acupuncture Society

Whilst acupuncture has been used extensively for control of chronic cancer-related and treatment-related cancer pain, the majority of the papers on the subject are observational to date.1;2 The most important detail is that any treatment should follow an orthodox diagnosis. Acupuncture has been found to improve pain control and reduce analgesic requirements and improve mobility in cancer patients. It is especially helpful with cancer treatment-related pain such as post-surgical and irradiation pain syndromes.

Acupuncture is also gaining an increasing evidence base for palliation of non-pain symptoms such as advanced cancer-related dyspnoea, xerostomia, acute pain control and hot flushes due to hormonal manipulation or menopausal symptoms.

Serious side effects of acupuncture are known to be rare.3;4 Though acupuncture is relatively safe with a low incidence of serious side effects, they can and do occur.3;4 There are numerous contraindications to acupuncture in palliative care, e.g. around an unstable spine, and in a limb at risk of or with lymphoedema, and safety aspects around palliative care have been reviewed.5 Great care needs to be taken with cachectic patients, over prostheses and in patients with gross clotting malfunction. It is potentially unsafe to use acupuncture without a reasonably full knowledge of the clinical stage of the disease and current status of orthodox therapy. Semipermanent indwelling needles are being increasingly used for patients with advanced cancer and symptom control and their role will be outlined.

If tolerance to acupuncture occurs in a patient who has usually responded well to acupuncture, it may well be due to disease progression and early further clinical staging of the patient may be indicated.

A large scale prospective study on adverse effects of acupuncture in oncology and palliative care would seem desirable to identify any further specific problems in this population group.

- 1. Filshie J, Thompson JW. Acupuncture. In: Doyle D, Hanks G, Cherny N, Calman K, editors. Oxford Textbook of Palliative Medicine. Oxford: Oxford University Press; 2004. p. 410-24.
- 2. Filshie J. Acupuncture in palliative care. European Journal of Palliative Care 2000;7(2):41-4.
- 3. Acupuncture in Medicine (Safety Issue) 2001;19(2):84-122.
- 4. White A. A cumulative review of the range and incidence of significant adverse events associated with acupuncture. Acupuncture in Medicine 2004;22(3):122-33.
- 5. Filshie J. Safety aspects of acupuncture in palliative care. Acupunct.Med. 2001;19(2):117-22.



#### SYDNEY CONFEDENCE - AMAC/ICMADT OCTOBED 2004

## 1) Acupuncture and Psychotherapy in Blepharospasm

### J Nepp(1,2), Richter-Müksch S(1), Linzmayer L(3), Jandrasits K(1), and A. Wedrich(1)

- 1 Medical University Vienna, Department of Ophthalmology, Austria
- 2 Institute of L.Boltzmann f Acupuncture, Vienna
- 3 Mdical University Vienna, Department of Psychiatry, Austria

Objectives: Observations of psychic troubles and pathway and the approach / access of therapeutics to the patients under the influence of acupuncture.

Patients: Blepharospasm because of psychic troubles

Method: We compaired patients, who received psychotherapy because of psychosomatic troubles

by Questionaires. For subjective troubles we used the visual analog scale (VAS), for spastic complaints

we measured the temperature (flow diminished by spasm) and we used a image analyser.

For psychic outcome we used a questionnaire for sensitivities, or feeling of emotions and handicap by spasm (Elston score) and a description of the psychotherapeutic progress.

To compare we observed the same patients in the waiting list before acupuncture.

Acupuncture was done by laser once a week for 10 times. Statistic were done by students t-test

Results: After treatment with acupuncture there were better proceedings of the psychic therapy, the spasm were reduced and emotional disabilities, like anger and frightness were reduced.

There were significant improvements after acupuncture.

Conclusion: The treatment with acupuncture only has shown a very weak effect on blepharospasm with short durations like other relaxing methods like Jakobson or Autogenous Training

In combination there was a positive effect on the psychic troubles, on the emotional stability and on subjective feelings, too. Temperature rises and psychotherapeutic features improved. Patients told from smaller handicaps and from improved effects on their mind: Anxiety reduced as well as avoiding aggressions.

Earlier studies showed a good effect on the vegetative system, especially in psychosomatic complaints.

After acupuncture Patients told, that they could easier speak about their troubles.

Thus leeds to the theory, that acupuncture have a major role in the psychotherapy, by the reduction of somatic (vegetative) disorders and the rei-nforcing of the psychic condition. It may be an effect of the alleviated (erleichtert) access to the psychic state.





### **Acupuncture and dry eyes**

### J Nepp (1,2), Funk M(1), Markovic O(1), Schild G(1), Wedrich A. (1)

Medical University Vienna, Department of Ophthalmology, Austria and Institute of L.Boltzmann f Acupuncture, Vienna

Objectives: Study to find the effect of acupuncture

Patients: patients with dry eyes

Methods: Etiologic classifications and symptoms as we find in western and eastern medicine

Dry eyes determined by Schirmer-II- Test, break up time of the tear film and lipid layer thickness.

Acupuncture was done with laser at points according to their syndrome.

Features compared to patients own waiting list according to their etiology.

Results: Patients with Yin disabilities had worse results than patients with Yang syndromes, in western medicine the best effect was observed in psychic tension, vegetative and emotional complaints, worst results were patients with toxic and immunological troubles.

Age and acupuncture effect was in direct significant correlation.

Conclusion: The background of the effect of acupuncture is to influence the functional disorders, which occure rather in younger persons and in superficial problems.





# The Use of Acupuncture for Pain and Symptom Control in Patients with Breast Cancer

#### **Dr. Jacqueline Filshie**

Consultant in Anaesthesia and Pain Management

Royal Marsden Hospital, London and Surrey

Secretary of the British Medical Acupuncture Society

Breast cancer is a major cause of death in women across the world and also affects a small proportion of male patients. Symptom relief throughout the cancer journey is of paramount importance. The literature on this subject will be reviewed as well as principles of treatment from the author's own extensive practice.

Acupuncture given perioperatively can decrease acute pain following surgery and symptoms of nausea and vomiting.1 Acupuncture helps nausea and vomiting due to both standard chemotherapy and high dose chemotherapy.2 Acupuncture has been found to improve mobility and pain control on exercise versus a control group in the early postoperative days following axillary dissection.3 Acupuncture can improve mobility sufficiently to enable radiotherapy in cases with restricted mobility and can reduce the pain and burning during and after a course of radiotherapy. Acupuncture has resulted in a statistically significant improvement in pain, depression, distress levels and pain behaviour in patients.4 Acupuncture has helped healing around the flaps of reconstructive surgery5-7 as has TENS,8;9 and can reduce the pain following reconstructive surgery and of radiation-induced brachial plexopathy.

Acupuncture has a possible promising future helping to diminish the acute to chronic post-surgical breast pain continuum in addition to treatment of more established tumour and treatment-related pain. Challenges remain how to prolong the analgesia in patients with advanced cancer, challenges which have already been partly met in patients who gain relief from advanced cancer-related disabling dyspnoea.10 Hot flushes secondary to hormone therapy can be particularly troublesome and may be alleviated by acupuncture.11-14

- 1. Aldridge S. Acupuncture helps breast cancer patients (abstract). American Society of Anaesthesiologists Annual Scientific Session 2001.
- 2. Shen J, Wenger N, Glaspy J, Hays RD, Albert PS, Choi C et al. Electroacupuncture for control of myeloablative chemotherapy-induced emesis: A randomized controlled trial. JAMA 2000;284(21):2755-61.
- 3. He JP, Friedrich M, Ertan AK, Muller K, Schmidt W. Pain-relief and movement improvement by acupuncture after ablation and axillary lymphadenectomy in patients with mammary cancer. Clin.Exp.Obstet.Gyneco 1999;26(2):81-4.
- 4. Filshie J, Scase A, Ashley S, Hood J. A study of the acupuncture effects on pain, anxiety and depression in patients with breast cancer (abstract). Pain Society Meeting 1997.of the body heat/excess)





### Cochrane review has missed the point with acupuncture and low back pain.

#### Dr. Ian Relf

Fellow and Examiner, Australian Medical Acupuncture College

Background: Low back pain has far reaching economic and social consequences. Proper evaluation of widely used interventions such as acupuncture is important for making evidence based clinical decisions. The Cochrane review (1) has carefully assessed the trials regarding randomization and blinding. However several other important technical aspects of treatment need to be considered. These include cross over trial design, 'placebo' needling (2) and adequacy of treatment.

Objectives: To assess the merits of the Cochrane review of Acupuncture in low back pain.

Methods: Apply the available evidence and clinical guidelines to evaluate the eleven trials included in the review of low back pain.

Results: The review included seven trials with flawed trial designs or inadequate treatment that should be excluded. The three randomised controlled trials with adequate acupuncture treatment in low back pain all show positive outcomes. None are of high quality. Only one trial in chronic low back pain is of acceptable standard. The sole trial in acute low back pain is positive but of low quality.

Conclusion: The review of acupuncture in low back pain is fundamentally flawed because the assessment of trial design or treatment adequacy is not based on clinical guidelines or available evidence.

Acknowledgements: Thankyou to the support from the Department of General Practice at Melbourne University, and Ms Tracey Higlett.

- 1. van Tulder MW, Cherkin DC, Berman B, et al. Cochrane Database of Systematic Reviews 2003;3:3.
- 2. Le Bars D DA, Besson SM, Diffuse noxious inhibitory controls (DNIC). 1. Effects on dorsal horn convergent neurons in the rat. Pain 1979;6:283-304.





# Effects of 830nm laser on cultured rat dorsal root ganglia: implications for its use in acupuncture.

### Roberta Chow MB MS FRACGP M.Appl. Sci. (Med. Acu)

Background: The use of laser as an alternative to needle acupuncture, whilst being widely used in clinical practice, shows variable results in a limited number of clinical trials and lacks a plausible mechanism of action by which acupuncture points could be stimulated.

Objective: The objective of this study was to examine the morphological effects of 830nm laser on rat DRG neurons in culture and to identify energy changes in mitochondria within these neurons from which potential effects on acupuncture points might be inferred.

Methods: Neonatal rat DRG neurons were dissociated and cultured for 3 days and irradiated for 30s on day 4. Following laser exposure, the neurons were subject to immunostaining with ß-tubulin antibodies and examined by fluorescent microscopy. Parallel cultures were incubated, for 15 minutes, with JC-1, a fluorometric dye, to define the distribution and energy changes in the mitochondria of the neurons.

Results: Immunohistochemistry showed beading in the axons of the irradiated neurons, compared with unirradiated controls. Mitochondria were seen to be clustered in the beading and the axonal hillocks. There was also a decrease in membrane potential in mitochondria within the beading and high-energy mitochondria were clustered at the axonal hillock.

Conclusion: These changes are consistent with disruption of microtubule arrays and axonal transport. A decrease in the mitochondrial membrane potential and the associated reduction of ATP may underlie this effect. These data provide a possible mechanism by which 830nm laser may induce a neural response and effect an acupuncture response.

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# The Effects of 830nm laser on cultured rat dorsal ganglia: Implications for the analgesic effects of laser acupuncture

### Roberta Chow MB MS FRACGP; Patricia Armati PhD

Background: The acceptance of laser therapy in the management of pain has been hindered by the lack of a plausible mechanism of action [1]. Clinical observation by the author (RC), of patients experiencing rapid relief of pain and occasionally describing "numbness" in the areas irradiated, led to the hypothesis that pain relief may be mediated by a direct effect of laser on peripheral afferent fibres.

Objective: The objective of this study was to examine the morphological effects of 830nm laser on rat DRG neurons in culture and to identify energy changes in mitochondria within these neurons.

Methods: Neonatal rat DRG neurons were dissociated and cultured for 3 days and irradiated for 30s on day 4. Following laser exposure, the neurons were subject to immunostaining with ß-tubulin antibodies and examined by fluorescent microscopy. Parallel cultures were incubated, for 15 minutes, with JC-1, a fluorometric dye, to define the distribution and energy changes in the mitochondria of the neurons.

Results: Immunohistochemistry showed beading in the axons of the irradiated neurons, compared with unirradiated controls. Mitochondria were seen to be clustered in the beading. There was also a decrease in membrane potential in mitochondria.

Conclusion: These changes are consistent with disruption of microtubule arrays and axonal transport [2]. A decrease in the mitochondrial membrane potential in the axons and the associated reduction of ATP may underlie this effect. These data provide a possible mechanism for the decrease in nocioceptive response in peripheral sensory afferent fibres following treatment with 830nm laser [3].

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# A Critical Assessment of Functional Ear Points and Implications for Diagnosis and Treatment

### Bryan L. Frank, M.D.

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Abstract: "Master Points" are some of the most recognized auricular points and are often used in the treatment of many ailments. Zero Point, Shen Men, Sympathetic, and others are known to have a powerful influence in treating various conditions including pain, sedation, addiction treatment, and inflammation.

While these "Master Points" are universally recognized in the auricular acupuncture world, they are not associated with any specific organ, and were derived from observations of functional effects, not with respect to the body's anatomy or embryology. The Nogier French auricular system has, however, developed with anatomic and embryological understanding and consistency with respect to localizations of the points or zones. Patients who have not responded to basic Auricular Therapy will often respond dramatically to advanced techniques.

Important advanced Auricular Therapy concepts include the multiple Phases of pathology represented on the auricle, the clinical picture associated with the multiple Phases, and implications and methods of treatment determined by the presentation of the specific clinical case.

Conclusion: Diagnosis and treatment through advanced Auricular Therapy techniques gives greater clinical insight into the patient's pathophysiology and may also result in enhanced clinical outcomes. A critical assessment of "functional" ear points is important to better understanding of the role of Auricular Therapy in medicine.





# **Enhancing Clinical Outcomes in Auricular Therapy Phases, Frequencies, Equipment**

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Abstract: Advanced Auricular Therapy can greatly enhance the clinical outcomes seen in daily practice beyond that typically seen with casual or basic Auricular Therapy. Key to these advanced techniques include a thorough understanding and application of Nogier's Phases, the full importance of the multiple frequencies of stimulation, and proper use and selection of various detection and treatment equipment.

Dr. Frank will present the Phases as an extension of pathophysiology commonly interpreted in daily conventional biomedicine. Without addressing a patient's clinical picture in a complete manner, optimal results should not be expected. Much confusion has surrounded the understanding of frequency zones and treatment frequencies. Finally, with many treatment and detection devices to choose from, much confusion and misunderstanding exists on the part of practitioners and marketers.

Dr. Frank will present a systematic and logical approach to optimal clinical outcomes through advanced Auricular Therapy.

Conclusion: Most auricular practitioners and teachers address the ear from a casual or basic approach. Much of the present literature embellishes these basic concepts without addressing advanced approaches that can lead to a significant improvement in clinical outcomes. These include systematic and logical use of Nogier's Phases, 7 Frequencies, and a rational consideration of auricular equipment.





### **Acupuncture research: from observation to prediction**

#### **Charles Shang, MD**

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Acupuncture research has integrated with modern developmental biology as well as research on growth control and signal transduction. The resulting theory successfully predicted multiple results in both acupuncture and conventional biomedical research – setting the first example of a theory with significant prediction power in acupuncture research and in integrative medicine. According to this theory, acupuncture points originate from the organizing centers in growth control and both are singular points of bioelectric field. This theory has explained observations in both developmental biology and acupuncture research, including the distribution and non-specific activation of organizing centers and acupuncture points, the high electric conductance of acupuncture points, the polarity effect of electroacupuncture, the duration of therapeutic effects and the side effect profile of acupuncture, as well as the origin and physiological function of the meridian system - most of these have not been explained by neurobiology. The growth control theory of acupuncture is compatible with the findings in the neurobiology of acupuncture. In embryonic development, the development of organizing centers in the growth control system precedes the development of the nervous system and other physiological systems. The formation and maintenance of all the physiological systems are directly dependent on the activity of the growth control system. The evolutionary origin of the meridian system as an intercellular signal transduction system of growth control is likely to have preceded all the other physiological systems, including the nervous system. Its genetic blueprint might have served as a template from which the newer systems evolved. Consequently, it overlaps and interacts with other systems but is not simply part of the nervous system. The growth control signal transduction is embedded in the activity of the function-based physiological systems. The regulation of many neural, circulatory or immune processes is through growth control mechanisms such as hypertrophy, hyperplasia, atrophy, apoptosis with shared messenger molecules and common signal transduction pathways involving growth control genes such as proto-oncogenes.

In several 'prospective trials', the following predictions have been confirmed:

Acupuncture has extensive growth control effects: Acupuncture has been shown to regulate the secretion of various growth factors and the expression of various growth control genes. Acupuncture regulates apoptosis, regeneration, differentiation and cell proliferation of various tissues. The 'classic' neuro-humoral factors induced by acupuncture such as endorphins and serotonin also have growth-control effects.

Singularity and separatrix have important roles in developmental biology.

Organizing centers in growth control have high electric conductance and high density of gap junction – just as acupuncture points.

A high density of gap junctions distributed as separatrices or boundaries at body surface.

These results suggest that the relation between acupuncture and growth control should be a major focus in future research. Techniques involving the stimulation of the growth control system may activate the self-organizing activity of an organism and improve its structure and function at a more fundamental level than symptomatic relief. Development of these techniques may enable the diagnosis and treatment of a pathologic process at the early signal transduction stage prior to the anatomical or morphological change. Future directions include:

Mapping of the meridian system and the dynamics of its electric field with high resolution techniques such as the superconducting quantum interference device (SQUID).

Developing meridian system based techniques of early diagnosis and treatment.

Delineating the cell differentiation and signal transduction in meridian system.



SYDNEY CONFERENCE - AMAC/ICMART OCTOBER 2004

# The New Laser-Needle-Acupuncture in Clinical Application

### Dr. med. Dipl.chem. Michael Weber

Acupuncture with laser-needles was introduced for the first time 2001 in therapy. It is a pain-free procedure, with which multiple laser-needles with high power density in the sense of a simultaneous treatment are put on the skin in the entire body region and in accordance with the rules of the TCM causes a needle-equivalent acupuncture. The needle-equivalence was proven as well in clinical as in fundamental studies with the help of so-called high-tech measuring methods at the brain. The new laser-needle acupuncture method possesses already a broad clinical and scientific basis and might position itself as a new equal method in the acupuncture treatment. In this lecture I will present to you the clinical results from own studies of approx. 2000 treatments from the years 2002 to 2004. Thereby it features predominantly orthopaedic disease pictures such as joint and spinal column illnesses as well as neurological disease pictures such as headaches, tinitus and migraine. It was shown that the laser-needle therapy led to a high percentage of long-term improvement of the complaints in the mentioned disease pictures. Beside the clinical results the parallel running technological advancements are going to be discussed. Thus it succeeded in the mentioned period to optimise the for the first time presented laser-needle systems in the year 2001 by the employment of different wavelengths and intensities and to thus improve further the clinical successes. A view on the new technological and clinical possibilities will be given. It may be expected that the new laser-needle method, which connects the traditional rules of the acupuncture science with modern optical methods pain- and side effect-free, will develop itself into an important method in the future.





### **Gold-Implantation. A New Method for Treating Chronic Arthritic Pain**

### **Dr. Hans Kjerkegaard**

Background: In 1978 an American veterinarian began to implant gold beads in dogs suffering from hip-dysplasia. Originally, he had treated these animals successfully with acupuncture which, of course, was always a temporary solution. The majority of the dogs getting gold implants became pain free based on their subsequent behaviour. They used to limp and did not eat well. After the implants they could run around and their appetites improved. Later he successfully treated dogs with collapsed discs.

Now veterinarians in Western Europe and North America widely use this gold implantation method. Danish veterinarians began to use this method in 1985, treating dogs and horses suffering from arthritis in various limbs.

Dogs are fully anaesthetised during the gold implantation in which large implantation needles are used. Gold beads are implanted right outside of the joint capsule. X-ray pictures are taken before and after the procedure.

The veterinary results are:

- (1) The majority of the animals get rid of their pains.
- (2) There are no side effects.
- (3) The gold implants do not migrate from the implantation sites.
- (4) The process is simple and inexpensive compared to, for example, alloplastic.

## My Experience With Gold Imlantation in Human Beings

Based on the good veterinary results, I started human gold implantation in 1996.

A 48-year old man was my first patient. He had a severe case of arthritis in one knee, which had been caused by injuries from playing soccer. His symptoms were aches, pains and swellings after any exertion. Shortly after the gold implantation these symptoms disappeared. Presently, now 8 years later, this knee is problem free, and he is even able to play badminton and soccer without any bad after effects.

Since 1996, I have dealt with approximately 6000 cases. About 50 percent of the patients suffer from lumbar disc degeneration, 33 percent have arthritic knees, and the remainder consists of those who have arthritic hips, cervical disc degeneration or arthritic problems in other body parts.

The Process: It consists of:

- (1) X-ray pictures have to be taken before any possible treatment;
- (2) All relevant trigger points have to be identified;
- (3) All active trigger points receive a small lidocaine block; and
- (4) If pains disappear after these blocks, gold beads are implanted at each active trigger site.

The 24 carat gold beads are 2\_ mm long and 1mm in diameter. Three beads are implanted at each trigger point by using 14 G injection needles with respective lengths of 38mm, 60mm and 80mm.

DVD Movie about goldimplantation, lasting about three minutes. This movie demonstrates the implantation technique.

Preliminary Results: The veterinarians find positive results in about 80 %. We, the human doctors, find positive results in 2 / 3 of the patients.

Ongoing Research: Presently we are performing a double blinded research on arthritis in the cervical spine. We expect the results in a short time.





# The Study on the Analgesic Effect and Its Cholinergic Mechanism of Electroacupuncture In the Rat Model of Collagen-induced Arthritis

### Yong-hyeon Baek1, Hyung-in Yang2, Dong-suk Park1, Do-young Choi1

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Objective: To investigate the analgesic effect and its cholinergic mechanism of electroacupuncture(EA) in the rat model of collagen-induced arthritis(CIA).

Methods: Immunization of male Sprague-Dawley rats with bovine type  $\leq C \Rightarrow$  collagen emulsified in Freund's incomplete adjuvant, followed by a booster injection 14 days later, leads to development of arthritis in more than 70% of mice by 21 days postinjection. After Three weeks of first immunization, EA stimulation(2Hz, 0.07mA, 0.3ms) was delivered into Jogsamni(ST36) for 20 minutes. Analgesic effect was evaluated by tail flick latency(TFL). We compared the analgesic effect of EA with TFLs between pretreatment of normal saline and pretreatment of Atropine (1 $\beta$  /kg, intraperitoneal) and Neostigmine (100 $\beta$ /kg, intraperitoneal) in CIA.

Results: 1. TFLs were gradually decreased in CIA as increasing severity of arthritis. 2. Jogsamni(ST36) EA stimulation in CIA increased TFLs and lasted for 60 minutes. 3. Increased TFLs with Jogsamni(ST36) EA stimulation were inhibited with pretreatment of atropine in CIA. 4. Increased TFLs with Jogsamni(ST36) EA stimulation did not show an obvious synergistic effect with pretreatment of neostigmine in CIA.

Conclusion: Jogsamni(ST36) EA showed analgesic effects in CIA. The analgesic effects of Jogsamni(ST36) EA were inhibited by atropine pretreatment and combined application of Jogsamni(ST36) EA and neostigmine did not show an synergistic effect. These observations suggest that intrinsic muscarinic cholinergic pathways represent an important modulating system in pain perception of inflammatory pain in CIA. It is suggested that the active mechanism of analgesic effect in EA may involve the release of acetylcholine in the spinal cord.

Key Words: electroacupuncture(EA), tail flick latency(TFL), collagen induced arthritis(CIA), atropine, neostigmine





# 16 Stress reduce by dry needling controlling with biophysical method Chunghyul-Dan (Qingxie-Dan) Improves Arterial Stiffness in Patients with Increased baPWV

# Seong-uk Park, Chang-nam Ko, Woo-sang Jung, Sang-kwan Moon, Ki-ho Cho, Young-suk Kim, Hyung-sub Bae, Kyung-sub Lee

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Abstract: Background and Purpose: Pulse wave velocity(PWV) reflects arterial stiffness and is the marker of severity of vascular damage and prognosis of cardiovascular diseases.

Chunghyul-dan is a herbal formulation consisting of Hwangyeonhaedog-tang and Rhei Rhizoma. Recent studies have reported that it had anti-hyperlipidemic and anti-oxidative activities.

This study was conducted to evaluate the effect of Chunghyul-dan on arterial stiffness in patients with increased brachial-ankle pulse wave velocity (baPWV).

Methods: 10 patients with increased baPWV(>1400cm/sec) were recruited into the study. Subjects were treated with Chunghyul-dan (1800 mg per a day) for 8 weeks. Blood pressure, fasting blood glucose, lipid parameters, ankle brachial pressure index(ABI) and baPWV were measured before and after treatment. ABI and baPWV were measured using the recently developed device, VS-1000(Fukuda denshi, Japan).

Results: baPWV was significantly decreased after Chunghyul-dan treatment(1736.0±271.1cm/sec versus 1599.0±301.9cm/sec, p=0.032). There were no significant changes in blood pressure and lipid parameters. No correlation was found between the effect of Chunghyul-dan on arterial stiffness and changes of blood pressure or LDL cholesterol

Conclusions: This study provides the evidence for a significant improvement of arterial stiffness made by Chunghyul-dan treatment in patients with increased baPWV.

Key words: PWV, Chunghyul-dan, Atherosclerosis, Arterial stiffness





# Effect of Bee Venom Injected Intraarticularly On Knee Osteoarthritis: A Comparative Study with Saline Injection

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Background: Bee venom(BV) has traditionally been applied to inflammatory joint diseases in oriental medicine. In the present study, the clinical effect of intraarticular bee venom injection to knee joint in osteoarthritis patients, compared to saline injection, was investigated.

Methods: In a single-blind, randomized clinical trial, we studied 32 patients whose primary diagnosis were osteoarthritis. The experimental group (n = 17) received 1cc of refined bee venom intraarticularly 6 times in 3 weeks while control group (n = 15) received equivalent saline injection in the identical method. Visual analogue scale(VAS) for pain was assessed after each injection in both groups. Range of motion(ROM), the Knee Injury and Osteoarthritis Outcome Score(KOOS) were measured before and after 3-week intervention.

Results: Both groups showed significant pain relieving effect. Although more prompt analgesic response was observed in saline group, BV group showed more intense analgesic effect than control group after 4th session of injection(p < 0.05). BV group showed more marked ROM improvement which is not significantly different from that of control group. In the 5 subscales of KOOS, activity of daily life(ADL, p < 0.05), sports activity(p < 0.01) and total score(p < 0.05) were significantly improved in BV groups than in control group. On the other hand, the 2 groups didn't show significant difference in the subscales of symptoms, pain and quality of life(QOL, p > 0.05).

Conclusions: Intraarticular bee venom injection has more intense analgesic effect in knee osteoarthritis patients when applied more than 4 times compared with saline injection. During relatively short experimental period of 3 weeks, ADL and sports activity were improved significantly in BV group while QOL may need more time to be improved.





# **Nocipathy and Acupuncture: A Pilot Study on Patients with Lower Back Pain**

### Franz Daling and Stephan Buschkaemper

Research Issue and Background: Pain is felt as a complex psychophysiological phenomenon that evades objective assessment and may result in chronic illness with a strong negative impact on quality of life. This prospective pilot study examines the effectiveness of a newly presented diagnostic procedure and treatment method (nocipathy) for patients attending a general practitioner's practice for low back pain.

Method: Nocipathy is an integrative method combining a diagnosis of hypersensitive body points, their treatment with acupuncture, and psychotherapeutic procedures (imagination and systemic constellation techniques). The physiological substrate of the subjective pain involves sensitized nociceptive structures that become active as a result of an existing disorder and have a reduced threshold for pain stimuli. A standardized subliminal needle stimulus (nocignostics) is used to systematically examine the body surface for active (acupuncture) points. This diagnosis results in a pattern of points on the body surface representing the structures related to the pain sensation, and making them accessible to direct therapeutic intervention. Acupuncture is applied to these points to ease pain and stabilize disturbed body functions. It is assumed that unconscious mental contents are reflected in active points and subjective complaints. This pattern of active points also provides an orientation for resolving the existing mental dynamics by psychotherapeutic interventions. This work often leads to successful contact with the underlying mental disturbances. If the unconscious process can be brought to light, both subjective complaints and the points related to them will start to normalize.

Patients and Treatments: From the beginning of 2002 until the end of 2003, 223 patients with low back pain were treated at the first author's general practice. 129 of these patients participated in the pilot study "Nocipathy and acupuncture" in cooperation with the Psychology Department at the University of Bielefeld. Data could be analyzed for 82 of these patients. They completed an anonymous questionnaire before and approximately 4 weeks after the end of treatment. The average age of these 82 patients was 47.85 years (SD = 13.90 years) and 74.4% were women. 84.1% had chronic (> 6 months) low back pain complaints; 93.9% had already undergone other therapies for these complaints (an average of M = 2.2 prior therapies, SD = 1.36). Each therapy started with a diagnosis and documentation of hypersensitive points ranked according to sensitivity (Visual-Analogue Scale, VAS 0-10). An average of 6 and a maximum of 14 disposable acupuncture needles (0.3 x 3-5 cm) were applied to points with a VAS score of 8-10, triggering the Deqi sensation in deeper tissue. Patients underwent an average of 13.75 treatments (SD = 2.45). These lasted 10-15 min and were repeated every 3-4 days. During the resting phase of needle application, patients were instructed to generate internal images and symbols (e.g., colors) to represent the body sensations in the region under treatment. In addition, they were given the opportunity to work with a systemic constellation of the pattern of points found on the body and the symbols appeared in a psychotherapeutic setting. All treatments were carried out by the same therapist (General practitioner, DÄGfA B diploma, Nanjing International Training Center, systemic family therapist).

Results: When self-rating changes in complaints 4 weeks after treatment, 96.3% of the patients reported an improvement. 18.3% of patients were free of complaints; 53.7% felt much better; 24.4% slightly better than at the beginning of treatment; 3.7% reported no change; and 0% a deterioration.

Pre-post-treatment comparisons of health-related quality of life (HRQoL; assessed with the SF-36) revealed significant to highly significant improvements on all SF-36 scales. The effect sizes of the improvements on the 'Bodily Pain' (effect size = 1.51), 'Vitality' (effect size = 0.88), and 'Role Physical' (effect size = 0.87) scales were large.

Conclusions: Results indicate the potential effectiveness of nocipathy combined with acupuncture for patients with chronic low back pain. Further tests and a comparison with other treatment procedures applied within pain therapy are needed within the framework of a multicenter study.

Keywords: Nocipathy, Acupuncture, Nocignostics, Chronic Low Back Pain, Systemic Pain Therapy

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# Clinical Effect of Acupuncture Combined with Multiplet Laser Acupoint Needling on Arthralgia and Neuralgia of the Elders with Chronic Problems

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Abstract: Objective To observe the therapeutic effect of acupuncture combined with Laser acupoint on arthralgia and neuroalgia from 135 elders with Chronic arthritis (CA, 33%), Postherpetic neuroalgia (PN, 24%), Rheumatoid arthritis (RA, 23%) and Vasculitis in extremities (VE, 20%). Methods These patients were operated on their due acupoints with acupuncture needling together with irradiating of the multiplet Laser (Laser-Acupuncture needling) as compared with those of other regimes including single needling, electro-acupuncture and single Laser acupointing, on the base of TCM meridian's theory for the acupuncture formulae. Results The alleviative rate of the disorders' pain were 92.51±12.50% (PN), 61.37±8.39% (CA), 58.81±5.75% (RA) and 50.39±6.30% (VE), respectively; while the total effective rate of the regimes was by 83.51±2.58%. Of the different regimes, the Laser-Acupuncture needling and single Laser acupointing are preferable to both single needling and electro-acupuncture followed by the severe analysis (p<0.01 and p<0.05). Conclusion The Laser-Acupuncture needling is a modern and highly efficient way of the homeopathy.

Key Words: Acupuncture; Laser; Pain; Elder

http://mail.sina.com.cn/chooseMode.html





# The C.H.R.I.S. Theory on the Aetiology and Perpetuation of Back Pain

### Dr Chris K. Chin M.B., B.S., (W.A.) F.A.M.A.C.

The C.H.R.I.S. (Chin Hip Rib Impaction Syndrome) Theory may become the most significant discovery of the mechanism in the aetiology of Back Pain. It has the potential to revolutionize the active and passive management of this complex and high prevalence public health problem.

Back Pain has become one of the most common causes of chronic disability in our society affecting 80 % of the population at some time of their lives. Not only is it important economically to employers, insurance companies and to the patient, but also psychologically in the form of illness behaviour, fear, anger, anxiety and depression as a result of chronic pain, loss of income and loss of hope that they will ever recover fully. Studies at Stanford University Medical Centre found that 66% of asymptomatic subjects in their study had evidence of disc pathology on MRI scans and the study concludes that there was no correlation between the subjects suffering from low back pain and the ones having disc pathology on MRI scans. Studies conducted in the U.K. show that 93% of back pain sufferers have mechanical pain and only 7% have nerve root compression or other serious spinal pathology. Studies in Myofascial Pain Syndrome have found that 97% of back pain sufferers have active Myofascial trigger points. So far there has not been a definitive patho-anatomical explanation for lower back pain.

I propose a Biomechanical theory that could explain the aetiology of low back pain in 93% to 97% of patients and is consistent with our current knowledge, understanding and recently published evidence on this condition. It is based on the fact that almost all the patients with back pain that I have seen since I discovered this phenomenon have the presence of Ashi points at the sites where their lower ribs (Liv13, Front-Mu Point of the spleen.G.B.25, Front-Mu Point of the kidney.G.B.26) are impacting on their iliac crest at the hips (Ashi points correlating to the Myofascial Trigger points of the Lateral Abdominal & Gluteus Medius Muscle). I then ask the patient about the mechanisms of the original back injury and I invariably find that at the time of onset of back pain or a few hours prior, there has been an incident at which there was a high probability of impaction of the hips and the ribs. On further history taking and examination of their posture I almost always find that the phenomena of the hip rib impaction is also a major perpetuating factor in the continuation of their pain. Apart from Ashi points in the lateral abdominal muscles and Gluteal muscles, the hip rib impaction causes inflammation of the lower costovertebral joints (B48.B49.B50) as well as sacroiliac joints (B27.B28) and zygapophyseal joints of the lower thoracic and lumbar spine (B18 to B25). Hip rib impaction may also cause a traction injury to the superficial and deep Para spinal muscles between T10 and S1 and in combination with the inflammation of the underlying zygapophyseal joints lead to active Myofascial Trigger Points in these muscles. These will lead to referred pain patterns around the lumbosacral area. I have been treating these patients with Low Level Laser Acupuncture with a AlGaAs Uni-Laser at 0.5 milliwatt for 3 to 5 seconds per point, 20 to 30 points per session for 5 to 10 sessions, 3 to 14 days apart depending on the chronicity of their back pain. By providing them with good pain relief they have improved mobility and are able to participate in stabilizing exercise programs. They have significant changes in mood including less anxiety, depression, fear of pathology and insomnia. By having the ability to give them pain relief and a simple and logical explanation of their problem, it produces faith and confidence in your management and so improve compliance. To encourage active self-management of their condition, I also instruct them in ways of modifying their posture and movement so as to minimize hip rib impaction. During the course of treatment I recommend exercises to their Para spinal and transverse abdominis muscles to improve their core stability. I hope that my presentation of this theory which combines aspects of Laser Acupuncture with Biomechanics and Myofascial Pain Syndrome will help us as Medical Acupuncturists to better understand and treat our patients with this common and debilitating condition, help us to logically find and determine which acupuncture points to use and to stimulate further discussion and research.





### **Acupunctue with extracorporal shockwaves**

### By Dr. Heinrich Everke

The extracorporal shockwave therapy is already well known in orthopaedic medicine, for example in the treatment of "frozen shoulder" or tennis elbow. Here the shockwaves are pointed directly at the painful point.

Another possibility is the treatment of trigger points with shockwaves in the therapy of lumbago or other painful orthopaedic problems. In these instances, the shockwaves are used to soften the contracted muscular structures by direct impulses on the afflicted area.

In my study I tried to find out whether it is possible to treat painful orthopaedic diseases by stimulating acupuncture points with shockwaves.

This seemed to be sensible for me because many acupuncture points are made up of pressure receptors, as we know from the methods of acupressure. This means that shockwaves of low intensity and small radius should be the adequate stimulus for acupuncture points.

Shockwave acupuncture would therefore be the ideal combination of the old knowledge of acupuncture with a modern technique of stimulation of pressure receptors in muscles and tendons.

Until now the instruments for producing shockwaves have been much too big to use in acupuncture. But in 2003 Storz-Medical, a Swiss factory for medical instruments, produced a very small machine capable of producing shockwaves for small areas on my demand. This special instrument can direct ballistic shockwaves of low intensity which are able to stimulate acupuncture points.

In my first studies on more than 100 patients I could show that this method is very useful for the treatment of the following diseases:





# Arthrosis of the knee, Coxarthrosis, Chron. Lumbalgia Pain of neck and shoulders, Tennis-elbow

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The results have been much better than the results of simple needle acupuncture.

A combination of needle acupuncture and shockwave acupuncture is possible and can improve the results of the treatment especially in cases of lumbar pain as well as the treatment of arthrosis of the small joints.

A possible explanation is the fact that shockwaves stimulate not only pressure receptors at the capsule of the joint itself, but also the distant acupuncture points in muscles and tendons that are connected to the affected joint which we know from our acupuncture experience. Shockwaves can soften the stiffened structures of the tissues around the joints directly and the effects on the acupuncture points cause a chain of reflexes, resulting in better mobility and nourishment of the affected area which lasts much longer than acupuncture alone. Even the flow of the lymphatic system will be enhanced.

The enforced production of synovial liquids by pulsating pressure on the cartilage via shockwaves is another important aspect of the treatment of arthrosis. Even the stimulation of the recovering of cartilage cells should be possible with this method.

Therefore, shockwave acupuncture is a new method in addition to moxibustion, electro acupuncture and laser therapy in the rich repertoire of acupuncture methods.





# The Management of Postural Problems Using Healthmarque Reflex Orthotics

#### **Dr Edward Butterworth**

Posture is partly controlled by direct information passing to postural muscles from fascial chains starting in the feet.

Fascia is made from collagen that is a liquid crystal substance and thus a semi-conductor capable of transmitting protons throughout the fascial connective tissue of the body.

A liquid crystal also exhibits the piezo-electric effect where a mechanical force is converted to electrical energy. This effect occurs in the plantar muscles with each footstep causing electrical charges to pass up the fascial chains to modify posture through their intimate connection with anti-gravity muscles.

Our technique allows us to identify individual weak plantar muscles and create reflex orthotics to stimulate the associated muscle chains to correct posture.

The orthotics treat Pes Cavus, Planus, Scoliosis, Plantar Fascitis and skeletal pain associated with chronic muscle imbalance.





### **Acupuncture in Oncology Practice**

#### Natalia D.Zubova

Medical Radiology Research Center of the Russian Academy of Medical Science, Obninsk, Russia

Introduction. The role of acupuncture in oncology is uncertain. The aim of this study was to assess the effectiveness of acupuncture to control pain resulting from cancer spread and also applicability of acupuncture to treat the adverse following radiotherapy or surgery.

Materials and Methods. Acupuncture was included into the treatment plan in 440 cancer patients startin from 1977. Eighty patients(1st group) with widespread cancer were treated for pain caused by skeletal or internal organ metastases. Three hundred patients (2nd group) were treated for late stage radiation damages to skin and internal organs as a result of radiation or combined treatment. In 60 patients (3rd group) acupuncture was used to prevent or to control surgical sequelae or complications (postoperative pneumonia, phantom pain). Corporal and auricle points have been used. The course of treatment was 10-14 procedures.

Results. In the 1st group acupuncture produced pain relief in 48 (60%) patients, but demonstrated no benefits with bone secondaries. Vascular and neurological impairment caused by radiotherapy (2nd group) was reduced in 255 (85%) patients. Phantom pain was eliminated in 34 (70%) patients of the 3rd group. Acupuncture produced no adverse effects.

Conclusion. Acupuncture may be used safely and effectively in complex management of cancer patients.





# **Traditional Chinese Medical Diagnosis**

### Dr S Aung

Traditional Chinese medical diagnosis continues to rely on the four pillars of inquiry, observation, palpation and auscultation/olfactory. Shen diagnosis is also vitally important, which involves assessing the state of a patient's spirit and vital energy (Qi).

Taken together, these diagnostic techniques comprise a powerful tool for building an effective treatment plan for patients. Observation of the eye and Shen, for example, could indicate a vigorous or sluggish constitution. The conjunctiva of the eye, when red, is a sign of excess heat in the Liver, a syndrome known as Liver Yang. Observation of the face is also important, since the right cheek is associated with the Liver, the left cheek and the chin with the Kidney and the bridge of the nose with the Spleen. A double chin generally indicates congenital Kidney Qi weakness. Dimples are indicative of Kidney abnormality, which may be confirmed by ultrasound and IVP techniques. The appearance of the lips, gum and tongue also provide valuable diagnostic information, since the lips are associated with the Spleen, the gums with the Stomach and the tongue with the Lung. Moreover, microsystems of acupuncture are useful diagnostic tools. These microsystems, such as ear, the scalp and the hand are holograms representing the whole body. The ear, for example, is a hologram taking the shape of an inverted fetus. A venous ear indicates acute conditions, whereas nodules on the ear indicate chronic structural damage. Correct diagnosis according to the above and other techniques leads to correct differentiation of syndromes. This, in turns, leads to the best TCM treatment based on acupuncture and related techniques such as moxibustion and cupping and other TCM therapies, including dietetics, herbal medicine, Qi Gong / Tai Chi Chuan and massage /manipulation. TCM diagnosis working in an integrative manner with biomedicine helps to build the best foundation for the therapies of choice and enhanced quality of life of patients.

# **Clinical Use of Medical Acupuncture in Oncology**

Medical acupuncture is especially useful for pain control in oncology. Pain is one of the most feared aspects of cancer and many cancer patients experience substantial pain at more than one site. Most of this pain is associated with direct infiltration of tumorinto nerve, muscle or bone, but some is the result of biomedical treatment protocols, notably, the iatrogenic effects of radiation, chemotherapy and surgery. This is not mere physical pain, but also psychological, social and spiritual discomfort, which is what the World Health Organization aptly refers to as total cancer pain. Medical acupuncture, therefore, focuses on total pain control in oncology, encompassing the primary pain of the cancer, and related discomfort, anxiety and depression, lack of energy, the will to live (low Shen) and ongoing immunology. Highly effective symptomatic points for treatment-or pearls of medical acupuncture in oncology-include LI.4 (general pain control), PC.6 (nausea, vomiting and depression), HT.7 (anxiety) and ST.36 and SP.6 (lack of energy). These acupoints are multi-functional. For example PC.6 is used not only for nausea and vomiting but also for cancer pain associated with nerve infiltration but also for post-operative pain and depression. Moxibustion is useful for Qi promotion and cupping for Qi sedation. Moreover, in the interest of total pain control, it is always useful to stimulate GV.4 and GV.20, two points on the Governor Vessel meridian that play a key role in enhancing the spirit and harmonizing Qi flow. Electroacupuncture is useful in the more severe cases of cancer pain, and the various microsystems are also vitally important. Auricular pins may be inserted and left in place for the patient to press when necessary for pain control and Qi boosting. Medical acupuncture, therefore, is a safe and effective modality for controlling the pain and fear that surrounds cancer.



# **Presentation of Results of Infrared Camera Use with Acupuncture**

#### W Maric-Oehler

I have something very very new and very interesting to offer for your next congress in 2005. In cooperation with a well-known physicist Professor F.Popp, Dr.Klaus Schlebusch and me documented some patients before, during and after acupuncture and moxibustion treatment with a new infrarot camera. The results have been very impressive. They show that the old diagnostic and therapeutic concepts of Chinese medicine seem to be correct. To be very careful we now could have found some kind of evidence. We will continue this work and if you want we could show it on your next conference as a lecture and some kind of experimental workshop with participants as patients.

The title could be 'Documentation of Chinese Diagnostics and Acupuncture Treatment with an new Infrarot Technology'

To give you an impression of our work I have attached some examples:

- No 1: wins, 33 years old, both of them having migraene attacks left patients more severe than the right, left patient also lumbago, status before treatment, frontal (lower part of the body cold/deficiency upper part
- No 2: same patients, status before treatment lateral right (gall bladder meridian)
- No 3: same patients, status before treatment lateral left (gall bladder meridian)
- No 4: same left patient, needeling UB 23, 31, 40, 60, moxibustion UB 23 (urinary bladder meridian)
- No 5: 30 seconds after No. 4 (urinary bladder meridian)
- No 6: 32 years patient, morbus crohn, acne vulgaris, polynosis, status before treatment, lateral right (gall bladder meridian)





# Acupuncture of LI-4 in anaesthetised healthy humans decreases cerebral blood flow in putamen measured with PET.

#### Lise Schlünzen¹

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Introduction: Acupuncture is largely used for pain control in several pathological conditions. Its effects on the central nervous system are, however, not well defined. Results from humans and animal studies suggest that acupuncture acts as a neuro-modulating input into the central nervous system that can activate multiple analgesia systems and stimulate pain modulation systems to release neurotransmitters such as endogenous opioids (1). Positron emission tomography (PET) and functional magnetic resonance (MR) have been used with wide success in the mapping of human brain functions. So far, the most important and repeatedly demonstrated activated structures during acupuncture analgesia have been hypothalamus, the limbic system, frontal cortex, cerebellum, insula and putamen (1). However, the noxious stimuli from the needling process itself and the subject's mental status and expectations may very likely influence the cerebral response to acupuncture resulting in activation or deactivation of certain cerebral structures not involved directly in the acupuncture analgesia.

In the present study we used PET to investigate changes in regional cerebral blood flow (rCBF) in anaesthetised healthy humans during manual acupuncture needle stimulation of LI-4 (Hegu acupoint). Acupoint LI-4 was chosen because it is the most frequently used in experimental studies of acupuncture analgesia. The study was approved by the Regional Committee for Ethics in Medical Research.

Methods: Ten healthy right-handed volunteers (age 21-27) were anaesthetized by sevoflurane 1 MAC while exposed to manual acupuncture needle stimulation of LI-4 (group I, n=7) or a near-by non-classical/non-analgesic point at the space between the 3rd and 4th metacarpals (group II, n=3 (preliminary results)), on the right hand. The needle was inserted perpendicular to the skin surface to a depth of approximately 1.0 cm and rotated clockwise and counterclockwise at a rate of about 180 times per minute (3 Hz). The stimulation commenced 3 minutes prior to the injection of H215O water and lasted during the whole scan procedure (~3 minutes). During 1.0 MAC sevoflurane anaesthesia (baseline) and 1.0 MAC sevoflurane anaesthesia + acupuncture, one H215O scan was performed, respectively. Cardiovascular and respiratory parameters were monitored and bispectral index (BIS) responses were registered. Areas of acupuncture related changes in rCBF compared to baseline were identified at a significance level of 5%.

Results: The volunteers were unconscious without eyelash reflexes at 1.0 MAC sevoflurane and none of them responded to the needle insertion. Cardiovascular, respiratory parameters and BIS values were maintained constant over time. No significant change in global CBF was observed during needle acupuncture compared to baseline in the two groups. Group I demonstrated a significant decrease in relative rCBF in right medial frontal gyrus (20%) and in the left putamen (17%) compared to baseline. Group II did not demonstrate any significant changes in relative rCBF compared to baseline. In group II rCBF was borderline decreased (p=0.08) in the right medial frontal gyrus; in the putamen no borderline significant changes were observed (p=0,95), both compared to baseline.

Conclusion: This study revealed that needle acupuncture of acupoint LI-4 produced decreased rCBF in the contra lateral putamen and decreased rCBF in the ipse lateral medial frontal gyrus, while "false needle acupuncture" produced a borderline significant decrease in the ipse lateral medial frontal gyrus, only. The data suggests that the putamen might characterize the



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central expression of acupuncture stimulation at the classical analgesic point and serve as one key element in mediating analgesic efficacy of acupuncture stimulation.

### References:

1 Ming-Ting Wu et al. Central nervous pathways for acupuncture stimulation: Localization of processing with functional MR imaging of the brain-preliminary experience. Radiology 1999;212:133-41.





# Pain relief of electroacupuncture corresponds with hypothalamic and periaqueductal gray activation – a single-blind placebo controlled fMRI study

#### M. G. Hammes

M. Valet, B. Reichenbach-Klinke, T. Sprenger, P. Erhard, M. Röttinger, T. R. Tölle Department of Neurology and Department of Neuroradiology & Neuroimaging, Technical University Munich

Introduction: Purpose of this fMRI study was to characterize the pain modulating effects of electroacupuncture (EA) on the cerebral processing of pain. This study may provide information about the physiological background of pain relief with acupuncture. Scientific acupuncture literature discusses the participation of hypothalamus and periaquaeductal gray (PAG) in pain relief.

Methods: 14 male volunteers (age 22 to 34 years) received single blind EA stimulation in two separate sessions on either 4 predescribed acupuncture points (Li4, Li11, St36, Sp6) or the "placebo version" of these points (2cm away from the original location of the afore-mentioned acupoints). A highly experienced acupuncturist inserted commonly used acupuncture needles (SeirinTM, soft needle, size no.8: 0.3x30mm) approximately 1.5-2 cm deep. In all points (verum, placebo) a typical needle sensation (DeQi) was achieved. The acupoints Li4 and St36 were electrically stimulated with 2 Hz low-frequency impulses, whereas the acupoints Li11 and Sp6 were electrically stimulated with 100 Hz high-frequency impulses. The impulse-intensity was adjusted just below the individual pain threshold. Preceding to EA, the volunteers were exposed to heat pain stimulation (4 noxious and 4 innocuous stimuli on the inner side of the right forearm, each lasting 40 sec). Individual heat pain sensations for unpleasantness and intensity were assessed on an 11-point numerical rating scale. EA was followed by an identical heat pain stimulation protocol in order to investigate the analgesic effects of acupuncture.

Functional magnetic resonance imaging (fMRI) was performed under heat pain stimulation before and after acupuncture as well as during EA stimulation on a SiemensTM Symphony 1.5 Tesla scanner with echo planar imaging (EPI) technique (matrix: 64x64; TE: 50ms; TR: 2.51s; alpha: 90°; FOV: 230mm, 28 axial slices). Imaging and statistical analysis (randomeffects, t-test) was performed with SPM2 software (Wellcome Dept. of cognitive Neuroscience, London, UK) to reveal information about differences between verum vs. placebo acupuncture as well as alteration of heat pain sensation after acupuncture.

Results: NRS values of heat pain intensity and unpleasantness decreased significantly after verum EA (Intensity: p<0.002; Unpleasantness: p<0.001; single sided t-test). No significant decrease was found after placebo EA. Only after verum EA cerebral heat pain activation decreased significantly in well known pain processing areas (insular cortex, anterior cingular cortex, secondary somatosensory cortex).

In comparison to placebo EA only verum EA activates the hypothalamus and the periaqueductal gray.

Discussion: This study demonstrates that acupuncture on correctly located acupoints produces pain relief for noxious heat stimuli. Underlying mechanisms may be the activation of pain modulating areas of the brain. Structures involved include the pain descending inhibitory system. The observed involvement of the PAG accords with a widely accepted theory which holds the PAG to be a key structure for pain inhibition. Our findings therefore confirm the assumption of Han of EA leading to an activation of hypothalamus and PAG. The results of this study may help to define the neurophysiological correlative of pain relief by acupuncture.





# **Acupuncture Treatment of Cerebral Palsy and Speech Disorders**

#### Petr Fiala M.D.

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In an ICMART Congress 1997 (Nicosia, Cyprus) we reported about the acupuncture treatment of handicapped children with cerebral palsy as a result of 3 years work with a group of 73 children (see the internet abstract rewiev of the congress). Now we have continued this work and in our further pilot study we can present results of treatment of the group of children towards their speech disorders — with the participation of the logopedics staff (speech therapists).

Nowadays we have results of nearly 10 years work with handicapped children as a fruit of th cooperation of the 1st Medical Faculty of Charles's University, Prague and an Institute for the rehabilitation of handicapped children named Arpida in Budweis (\_eské Bud\_jovice), CZ.

In our new pilot study 13 children's patients participated – 5 girls and 8 boys, of the age from 5,1 to 14,4 years, average 8,5 years. We examined 13 defective skills with the enormous importance for the correct speech as: opening and closing the mouth, pouting the lips, crawlig the tongue, moving the tongue in various directions etc. Among the speech diagnosis such as balbuties, dysphasy, dysarthris, anarthris a. o. prevailed.

We developed a special acupressure method so that also the rehabilitation staff and parents could be able to participate in this programmme (As only medical doctors can use the invasive methods as needels etc. in our country.). The treatment was carried on as often as possible to reach the summarized effect – e.g. every day, 5 days a week in a block of 3 months and afterwards with a 14 days break, all within a period of little more than 1 year.

The selection of points was carried out according to the failure of the concrete skill, so that the following meridians and points were used: Stomach, large intestine, small intestine, bladder, gallbladder, tripple warmer, governing and conception vessel, spleen-pancreas and some extraordinary points. We used the nearby and the distant points and a mild stimulation as a smooth massage, stroking, tickling, brushing with a toothbrush, tipping with the fingers etc.

To give the nearby points: stomach 3, 4, 5, 6 event. 9,10, large intestine 19, 20, small intestine 17, 18, 19, conception vessel 24, governing vessel 25, 26, 27, 28. Further distant points were used as – stomach 36, liver 2 and 3, bladder 10, 13, 17, 23, 40, 60, 62, gallbladder 3, 34, large intestine 4, 11, governing vessel 4, 12, 16, 20, spleen-pancreas 10 and others (further details in the fulltext-paper).

To be able to recognize better the progress, all the children were recorded (video) at the beginning before the treatment and then after the treatment period (see the full congress presentation).

The final improvement after 1 year therapy was reached in 12 children from 13. One girl improved in 8 skills, 1 boy didn't improve in any skill (a hard mentally handicapped child). The average degree of improvement in 1 child is about 2–3 skills from 13. At the beginning the children could manage 47 % of needed skills, by the end of the treatment period it was already 65 %.

Conclusinos: This pilot study showed that the method mentioned above and this kind of acupressure stimulation was successfull in treatment of children with speech disorders. In case of need further invasive treatment as needeling, using laser, TENS, cerebral acupuncture, Yamamoto NYSA ect. can complete this method to give our children's patients more chance.



# ScalpAcupuncture in the Treatment of Dyslexia and Dysgraphia

### E. Brauneis; A.Meng

Acupuncture and laser acupuncture have been used as additive therapies in the treatment of stuttering, aphasia, developmental dyslexia-dysgraphia, delayed language acquisition and hearing impairment for over 20 years at the Ludwig Boltzmann Acupuncture Institute

Scalp acupuncture zones according to Zeitler\* have always been a dominant part in the treatment of aphasia and have been proven to also have a very positive effect on developmental dyslexia and dysgraphia.

Dyslexia may be defined as a reading and subsequently spelling disorder that persists despite good schooling and normal, often above-normal intelligence. It is a handicap which affects an increasing percentage of the population.

The recent developments in neuroimaging such as fMRI show the regions or zones of the brain which are active during reading and writing. These brain areas are close to the scalp acupuncture regions described dyslexia/dysgraphia by Zeitler.

The potentials of such research will be discussed.

\* Zeitler H. Einführung in die Schädelakupunktur (21.2.1) in: Bischko J. (Ed) (1977) Handbuch der Akupunktur und Aurikulartherapie

3rd edition.





# Possibility of Treating Stroke Patients by Applying Soft Laser and Functional Electrical Stimulation (FES)

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Assessment,treatment and/or rehabilitation of stroke patients is a very complex proces and must be multidimensional. The damged nervous system is both plastic and adaptive and is thus capable of recovery via various mechanisms. Favorable biological influence and efects of physical/rehabilitational and other adjuvant procedures are shown in the velocity of recovery of patients and in the completeness of the same.

The aim of this paper was to find out a bether method to prevent the patologicl movement patterns, to keep and to develop normal ones, and to improve the final result of the rehabilitation proces. In order to achieve the desired goal in this clinical study, we have chosen two groups of patients. All of them were treated by regular, complex rehabilitation procedures. The experimental group was treated with soft laser and FES as an aditional therapy. Soft laser (infrared) has been applied with 1100 Hz, maximum external power per point to 2,2 J/cm2 on following acupuncture points: RM 23, DM 14,20, GB 21,34,39, ST 36,41, UB 10,60,62, Sci 5, Si 3 and Li 4,15; throught ten days continuously once a month. We used AM 15(SOCA) stimulator for FES therapy on n. peroneus m. deltoideus and on the extensor muscles of the weak/spastic hand.

In order to evaluate the results of treatment following parrameters were observed:functional recovery,neurological recovery,EEG,recovery of gait control,and recovery of speech disturbances. In processing of data in this clinical study we used certain tests such as FIM,Aschworth scale of spasticity,motor pattern test etc. All data was analised in order to quantify the effect of the tratment and in thet term we used statistical Pierson H2 test.

After evaluation of treatment result it is noticed a significant statistic difference in favour of the experimental group in terms of most observed parameters specialy within satisfactory functional recoverment.





# **Symptomatic Treatment of Rheumatoid Arthritis: Further Studies on the Long-Term Effectiveness of Acupuncture**

### G. Garofano, M. Cucci, A. Pirino, G. Geroldi, I. Saracco (Istituto Superiore di Agopuntura)

Background: Rheumatoid Arthritis is a systemic connective tissue inflammation with unknown etiology, most likely multi-factorial, surely with an autoimmune component. It prevalently affects women and it brings about a progressive articular disability, mainly affecting the hands, and a generally considerable pain picture. At present, the conventional therapies, besides being very expensive, are not resolutive and they bring with them a high risk of side effects. Following up other works we carried out in this field and that were presented in june 2004 at the conferences of the EAACI, and also following some studies already present in the literature, we wanted, by strengthening our sample, to verify the effectiveness of Acupuncture, which is a low-cost therapy and doesn't bring about any side effects, in the sympomatic treatment of Rheumathoid Atrhitis.

Method: The ability to make a distinction between "self" and "not self" develops during the intrauterine life. The TCM ascribes this stage to the Posterior Sky, while it ascribes the control of this aspect to the Tae Yin Energy. The Energetics of the Living Systems provides a protocol, called "Triangular Balancing", that is able to rebalance a mechanism acting correctly but against an atypical target.

We selected 26 women, aged 49.5 on average, with diagnosis of "Rheuathoid Arthritis" made at centers of clinical immunology of the Italian National Health Service. The patients presented specific autoantibodies, functional impotence, considerable pain picture in absence of permanent morphologic alterations. All the patients, waiting to start the conventional pharmacological therapies, started the physiokinesitherapy and the Acupuncture therapy at the same time. The Acupuncture treatment consisted in a cycle of 5 weekly sessions, lasting about 30 minutes each. At the end of this cycle, 9 patients underwent a second cycle after 6 months, while 5 patients underwent also a third cycle after one year. The acupoints utilized (selected according to an energetical protocol called "Triangular Balancing" on the Posterior Sky) were: Lu7, Ll4, St36, B60, CV12, GV9.

Results: After the first cycle, all the patients experienced a significant improvement in the pain aspect and in the articular functionality. Their response to the physiotherapeutic techniques proved to be better than the average of the patients treated with conventional therapies. At the end of the first cycle, 17 out of the 26 patients treated presented the disappearance of the pain symptoms along with an almost complete functional rehabilitation. This picture kept unchanged during the 12 months of observation that followed the end of the therapy. 9 patients suffered from a relapse with reappearance of both the pain and the functional impotence, although they never regressed to the levels preceding the treatment. This group of 9 patients underwent a second cycle of 5 sessions about 6 months after the end of the first cycle. At the end of the second cycle, 6 out of these 9 women reported the disappearance of the pain and the functional recovery. 3 of them went on experiencing the absence of symptoms, while 3 presented a partial regression of the therapeutic benefits. The 3 patients who didn't present any resolution of the clinical situation during the second cycle, as well as the 3 patients who experienced a recidivation of the clinical picture during the 6 following months underwent a third cycle as well after 6 other months, but they presented only a substantial stability of both the pain and the functional picture, athough this had improved if compared to the situation preceding the therapy.

Conclusion: 65.38% of the patients responded with the stable resolution of the symptoms after the first treatment cycle. This percentage reached 76.92% after the second cycle. The remaining 23.08% experienced a stable improvement of both the pain and the functional aspects without any regression, during the 12 following months of observation, to the levels preceding the therapy. Acupuncture, without any other therapies apart from physiokinesitherapy, seems to have exerted a significant influence on the positive evolution of the clinical pictures and on the stability of the results obtained. Despite the small power of the sample studied so far, the results obtained encourage the continuation of the research and the proposal of the Acupuncture therapy, alone or with other therapies, in the treatement of Rheumatoid Arthritis as well.





# Increased Cervical Lordosis After Deep Acupuncture in Patients with Neck Pain: Nonrandomized Clinical Control Trial.

### Lee Seung-Deok

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BACKGROUND: While, cervical lordosis is often used as an indicator for outcome of care, few conservative methods of rehabilitating sagittal cervical alignment have been reported. Previous research has indicated that a number of factors may change the lordosis. However, the link between deep acupuncture and cervical lordosis measurements has not been studied previously. OBJECTIVE: To examine radiological changes of the lateral cervical curve in patients who received deep acupuncture. DESIGN: For prospective nonrandomized controlled trial, consecutive patients were compared with control subjects. A total of 39 consecutive patients of the Department of Acupuncture and Moxibustion, Dongguk University, Korea (age=38.21±10.46 years, 53.8% male) with non-radiating neck pain. The deep acupuncture group (n=19) received 11.67±8.9 sessions of traditional acupuncture, the control group (n=21) received no special treatment. Lateral cervical radiographs were taken prior to the initiation of deep acupuncture and subsequently after the final session of treatment. In addition, pretreatment and posttreatment Visual Analogue Scale (VAS) pain ratings as well as lateral cervical radiographs were analyzed with the posterior Cobb method for changes in alignment. RESULTS: At a mean follow-up of 27.3 days (ranged 5-69 days), there was a mean change of 8.27 degrees in the cobb's angle for the deep acupuncture group (p < 0.05). The cervical sagittal alignment also improved in 10 (55.5%) of the 18 patients: Decreased or straight angles became lordotic and kyphotic angles became straight). However, the control group did not demonstrate significant improvement of the sagittal alignment over time (p = 0.8); The mean first and last follow-ups were 14.4 and 34.8 mo, respectively. CON-CLUSIONS: Changes of cervical lordosis were significant following deep acupuncture, even though this cannot be seen as proof supporting the clinical efficacy of deep acupuncture for neck pain as the results of this study were not adequately controlled. These findings suggest that further randomized, controlled clinical trial of deep acupuncture for the treatment of neck pain with decreased cervical curve is needed.





# "What we do with acupuncture?"

### Dr. Hegyi Gabriella MD.PhD.

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Introduction: The Stress (due to psychical, alimentation, chemical, environmental effects) is important factor for developing later diseases. Stress-coping mechanisms depend from individual personal ability for release, answer, elaboration, elimination. Selye J. distinguished 3 type of reaction :alarm, opposition, exhaustion phase. Long term lasting and repetition of stress often causes mild hypertension, sympathicotony damaging many other process of living organism. We have met him often as somatic complain (cardiac pain) or mild hypertension. Our aim is to prove that Acupuncture is much more effective than psychotherapy in the treatment of competition stress syndrome, and is worth further study. For this investigation we performed controlled clinical trial for proof effectivity of primary usage dry needling.

Methods: 215 patients (age 25-60, 140 femal, 75 male)were selected suffering from mild hypertension (essential) and psychosomatic complains. We measured tension (Ambulatory Blood Pressure permanent Monitoring for 24 hours =ABPM), complete laboratory (plasma, urine) abdominal UV, fundus, X-ray of head. Each patient were measured by physician with instrument forming ElectroDermal Analysis, without the aid of either a medical history or physical examination. Additionally they were examined by Electrocardiograph forming 3 D picture ("Cardioscan") involved the statistical cardiac stress analysis and evaluation of usual dates. Subjects were immediately evaluated by separate rater, medical acupuncturist, starting dry needling courses for 115 patients.(permanent AP technique for one month, after that controlled by ElectroDermal Analysis and "Cardioscan". 100 patients received sham acupuncture and beta-receptor blocker pills. Tree months later we performed the same procedures and evaluated examination of patients. Additionally we advised individually according to state of art food-intake-, salt-reduction, and weight-management for each of patient. Patients reported to fill VAS for psychical mood and somatic complain

Result: Acupuncture is suitable for treating early essential hypertension (neurogenic phase). It has been reported that the influence of acupuncture on hypertension might be related to its regulatory effect on the level of serum nitrogen monoxide. For mild and moderate essential hypertension, the hypotensive effect of acupuncture is much more potent than that of placebos and is comparable with that of certain conventional hypotensive agents. In addition, acupuncture is often effective for relieving subjective symptoms, and it has no side-effects. Encouraging results have been reported for a number of controlled studies on the treatment of heart disease with acupuncture, particularly in psychosomatic heart disorders, such as "cardiac neurosis"

The therapeutic effect was similar in the two groups, somewhat better in the test group for cognitive disturbance. Side-effects occurred in all cases in control group but in none in test group.

Conclusion: modern scientific research studies have revealed the following actions of acupuncture: inducing analgesia, protecting the body against infections and regulating various physiological functions. In reality, the first two actions can also be attributed to the regulation of physiological functions. The therapeutic effects of acupuncture are thus brought about through its regulatory actions on various systems, so that it can be regarded as a non-specific therapy with a broad spectrum of indications, particularly helpful in functional disorders. TCM explanation of how acupuncture works remain difficult to understand in the light of current knowledge of anatomy and physiology. But it is possible to apply western methods of evaluation in terms of controlled scientific trials. Current study offers no totally understanding of how AP works, but emphasizes that no limit the use of TCM technique for enhancing patient care ensure safety of techniques. The most important factor that influences the direction of action is the condition of the patient without side effects evaluated objective methods.





# The Effect of Saingheylyunbooemgami Extract to Recover Function of Stratum Coreum Mice Model After Dermatitis Elicitation

### CHOI IN-HWA, Lee Hyun-woo Dr. PhD.

Dongguk University, School of Oriental Medicine

Introduction and Objective: Applying the Saingheylyunbooemgami(SY) extract on to the Atopic dermatitis(AD) is to study change of external dermal formation, change of leukocytes in vasculature, change of lipid formation in stratum corneum and distribution of ceramide and this study is done through forcing injury to rat's back skin which are lipid protect formation in stratum corneum.

Materials and Method: The AD which caused intentionally using the external application on the rat's back skin was used the SY. The change of leukocytes in vasculature has been identified through optima 5.2 and student t-test and the results were made into dermal formation graph.

Results: After dispensing SY extract into the AD, the dermal injury was decreased. Especially, recover of lipid protection formation which include lipid and ceramide in stratum corneum is suppressing acute inflammation that some factors are PKC, TNF-\_, IL-12B which controlled the secretion of relating inflammatory cytokine, also went onto decrease of angiogenesis, and the decrease of degranulated mast cell. In addition, the decrease of epithelial injury also caused the growth of cell to decrease in stratum basale and cytoclasis. In the vasculature, the leukocytes were also decreased and it could relate to decrease AD.

Conclusion: Thus, SY has effect on AD suppressing the dermal injury through recovering of lipid protection formation in stratum corneum.





# **Cephalea: Confirmation of the Effectiveness of the Integration Between the Occidental Medicine and the TCM Approaches**

### Dr J Nepp

Acupuncture and Dry eyes Syndrome.

M. Cucci, G. Garofano, G. Geroldi, A. Pirino, N. Sinigaglia (Istituto Superiore di Agopuntura)

Introduction: The physiopathological model of cephalea considers it as being the result of systemic events of which headache is only one of the aspects, even if it is the most disabling. The pathogenetic mechanisms of the crises involve neurons, electrolytes, neurotranmitters, along with vegetative and vasomotorial components. The complex diagnostic survey of TCM involves the subdivision into several subtypes on the basis of both the "Differentiation of the Syndromes" and the placing of the energetical unbalance on the "Law of the Five Movements". By means of the "Energetics of the Living Systems" it is possible to combine the two approaches and to obtain an integrated diagnostic and therapeutic pattern that allows treating these very common and socially expensive diseases.

The aim of this work is to show the results of our studies on this subject.

Method: By placing the occidental physiopathological data on the Law of the Five Movements, we can notice that the 2 interpretations agree sufficiently to allow us to interpret the occidental data in an "Energetical" way. We can also notice that the integration confirms the global nature of the cephalalgic crises. The treatment suggested has the following aims: 1) to interact with the pathogenetic mechanism responsible for the crises by means of the energetical rebalance on the Law of the Five Movements, which is totally involved; 2) to act at the symptomatology level by means of linear treatments on the path of the meridians concerned. Since 1992 we have treated 200 patients aged from 18 to 52 (160 women and 40 men), selected according to the International Classification HIS. All the patients underwent weekly Acupuncture sessions until durable clinical picture mitigation as for both the frequency and the severeness of the crises. Subsequently, the frequency of the sessions decreased until complete resolution of the symptomatology for 3 months at least. The patients suffering from recidivations underwent short follow-up cycles with increasingly longer time intervals.

Results: We had 166 (130 women and 36 men) cases of absence of crises (83 %) one year after the end of the treatment. Out of the 34 patients (17 %) who suffered from recidivations and, consequently, underwent follow-up cycles, 10 (5 %) showed a significant, but not complete, improvement while 20 (10 %) turned out to be resistant against the therapy; 4 (2 %) slightly improved.

Conclusions: The power of the sample, more than doubled if compared to the previous works presented (ICMART 2000, Vienna), along with the good and lasting results obtained allow considering the integration between the occidental medicine and the TCM approaches as a valid instrument in the treatment of these diseases, which are highly disabling, widespread as well as socially and economically expensive.





# The Puzzle of Acupuncture

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Abstract: Acupuncture is based on the theory of channels, which serve as pathways for energy (Qi). On the course of the channels, acupuncture points are described, and by stimulation of these points, therapeutic effects may be achieved. This system is very complex and both channels

and acupuncture points are anatomically invisible. Unlike in Western medicine, scientists fail to trace both the origin and the progress of acupuncture theory. Having developed in its full form not later than the 2nd century BC, it never underwent fundamental change. On the other hand, it has become a part of modern Western medicine as an effective therapy and the existence of acupuncture points, specified thousands of years ago, has been demonstrated by modern science. It is hardly probable that acupuncture theory, although dating back to ancient times,

could have originated in primitive civilization. The origin of the energy channel theory does not fit into the traditional developmental scheme. The existence of the theory cannot be explained other than by its being a product of a highly developed civilization.

Keywords: Acupuncture: Origin.

Introduction: The puzzle of acupuncture "And the puzzle remains: how on earth can these loci have been identified by the Chinese physicians two millennia ago?" (Lu and Needham, 1980). Acupuncture has become a part of modern conventional medicine. It is taught at medical faculties, it is studied in scientific laboratories, and more and more practitioners are specializing in acupuncture therapy.

According to the World Health Organization (WHO), 10,000 practitioners used acupuncture in the United States in 1998, among them 3000 physicians (MD). In the countries of the former Soviet Union and Eastern Europe, most of those practicing acupuncture are medical doctors.

Scientific literature on acupuncture is abundant. Most of the articles are devoted to the efficiency of acupuncture treatment. Clicking for "acupuncture" in the "Medline" search V. WOLFSON 984

directory on the Internet provides 861 links! Conservative as it is, the National Institutes of Health (NIH) admitted the efficiency of acupuncture in the treatment of a number of diseases (Proceedings (NIH) 1997).

While gaining popularity in Western medicine, acupuncture is still regarded to be of secondary importance, due to its "non-scientific character," based on ancient philosophy. Could anything serious really be created in the Stone or Bronze ages, in primitive civilization? Do these methods have anything in common with medicine based on modern physics, chemistry, genetics and molecular biology?

Why then are we still using acupuncture? Why is it still gaining popularity? The answer may be that Chinese medicine, which has been developed for ages, has provided a good cognition of the human organism. As a result, a specific medical theory and practice were developed.

However, Western medicine also dates back to time immemorial. But while acupuncture is still based on the old theory and keeps using the same old terminology, modern Western medicine has almost nothing to do with the 70 volumes of Corpus Hyppocraticum, written in the 4th century BC. That is just the time when the Yellow Emperor's Classics of Internal Medicine, which is still in use as the manual for the acupuncture practitioner, was written. We can trace the development of Western medicine from its primitive condition to the modern complexity. Can we trace the development of acupuncture?

Early History and Canons of Acupuncture: According to available sources, acupuncture is first mentioned approximately in 600 BC, while the first information on iron dates back to 500 BC. However, the needles might have been made of copper, gold or silver, which were already available in small quantities even in the Shang period (1520–1030 BC). In archaeological excavations, bronze and bone needles were discovered, which date back to the Warring States period (480–221 BC) (Lu



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and Needham, 1980).

As we know, acupuncture is based on the theory of channels, which serve as pathways for a certain active substance or energy — Qi. In those parts of the channels which pass through the body surface acupuncture points are described, and by stimulating these points therapeutic effects may be achieved. Chinese medicine is represented by a number of schools and uses a number of methods (Unschuld, 1985), but all of them are based on the concept of energy channels.

The oldest book available, dealing with the energy channels and acupuncture point system, is the Yellow Emperor Classic of Internal Medicine (Huang Di Nei Jing). It is written in the genre of a conversation between the Yellow Emperor (Huang Di) and his ministers and consists of two volumes. The first of them, called Simple Questions (Su Wen), deals with a number of philosophical and medical problems, with acupuncture methodology specified as a healing method. The second volume, Spiritual Pivot (Ling Shu), which is regarded as the "Acupuncture Canon," specifies basic channels and acupuncture points in detail and describes acupuncture techniques (Veith, 1972; Wu, 1993).

PUZZLE OF ACUPUNCTURE 985:According to the legend, Huang Di, the third Emperor of China, was born in 2674 BC, and is considered the founder of the Chinese nation. However, it is still not known for sure when exactly the Yellow Emperor Classic of Internal Medicine was written, and therefore the date of origin is still a subject of numerous discussions.

In his work Review of Ancient Chinese Anatomy, E.T. Xie develops the idea that Huang Di himself is the Classic of Internal Medicine author. But although Xie believes that Huang Di was the founder of written Chinese, no traces of the written language before 2000 BC have been discovered as yet (Veith, 1972). Most of the authors find it hardly probable that the Classic of Internal Medicine was written by Huang Di himself (Veith, 1972). Lu Gwei Djen and J. Needham believe that Su Wen was written in the 2nd century BC and Ling Shu in the 1st century BC (Lu and Needham, 1980). Leon Wieger, S.J., basing his arguments on its style and contents, comes to the conclusion that Su Wen was written at the end of the 4th century BC (Veith, 1972).

Wu Jing-Nuan, who translated Ling Shu into English, writes: "The language of the text leaves no doubt that different parts of the treatise were written or rewritten and edited at different times. There is no way of knowing how great the gaps may be, hundreds or thousands of years." Neither does he deny the possibility of the books' contents dating back to the oral traditions of the Yellow Emperor's time (Wu, 1993).

Nan Jing (Classic of Difficulties) is the second most important Chinese medicine treatise. There is no evidence as to either the time the book was written, or its author's identity. The only thing that is obvious is that it was written after the Yellow Emperor Classic of Internal Medicine, due to the fact that most of the book is devoted to the discussion of the difficult problems covered in Huang Di Nei Jing.

According to the Chinese tradition, the book was written by Pien Chueh, a physician who lived in the Kuo principality during the Qin dynasty, 221–206 BC. Nan Jing is considered very important in Chinese tradition. It provides a detailed analysis of the pulse diagnosis, and difficult diagnostic and therapy problems. It also gives a comprehensive description of the Eight Extraordinary Vessels, mentioned in Nei Jing and discusses the importance of the Triple Heater channel (Dubrovin, 1991). However, it presents no further basic information as to the channels or acupuncture points, and if compared to the Huang Di Nei Jing, no channels or acupuncture points were added or changed.

In the 3rd century AD, Huang Fu Mi (215–286) wrote the comprehensive treatise of acupuncture, called Zhen Jiu Jia I Jin, based on the books available at the time. This treatise (12 volumes, 128 parts) would later become one of the basic sources for acupuncture science (Lu and Needham, 1980).

Thus, acupuncture became a theory before the end of the first millennium BC, or probably a long time before it. For example, even Huang Di Nei Jing deals with the difficult acupuncture problems. In the beginning of the Spiritual Pivot, Huang Di asks Qi Bo, his minister, to restore the original theory: "Please unravel this for future generations and enlighten them in the proper methods so this therapy will not be destroyed or severed for aeons." The Emperor ordered the use of fine needles and not the stone ones. It looks like the energy channel theory had been known long before the book was written. V. Wolfson 986



# **Discovery of Acupuncture Points and Channels**

What is this doctrine, underlying the acupuncture methodology? It describes a complex net of 12 primary channels and eight extraordinary vessels, which are the main pathways for the transmission of the Qi. Each of the 12 primary channels consists of an internal part, passing within the body and reaching the internal organs, and an external part with a number of acupuncture points along its course. Most of the channels are not straight: they form zigzags and loops, crossing other channels. Each of the 12 channels has the sinew, skin and divergent branches. Thus, we are dealing with an extremely complex system with all the channels and acupuncture points invisible! In ancient Canons, the channel courses and the acupuncture points' locations are described in detail as well as their physiology and pathology. How then was this structure discovered, if it has no visible manifestation? The most common hypothesis of the origin of acupuncture, based on the legends, suggests that accidental pricking or injuries in a number of cases caused therapeutic effect. Centuries of observations of such cases led to the gradual discovery of acupuncture points. When points were known, they were linked into groups with common characteristics and thus channels were described.

How realistic is this hypothesis? Considering that the acupuncture point area is 5 mm2 (Freeman, 2001), and the average adult body surface area is 1.6 m2, the ratio of the point area to that of the body surface is 1:320,000. To date 361 acupuncture points, located along the channels, have been described with 52 points located along the body midline and the remaining 309 symmetrically. Thus the probability of therapeutic effect in case of accidental pricking is 1:320,000 provided the point is on the midline, while if the points are located symmetrically, the probability is 1:160000. This means that it would take 40,000,000 attempts to discover all the acupuncture points known at present by means of accidental pricking. Suppose we need for therapeutic effect a combination of three points and they are to be defined randomly. We would have to try 7 of 1014 combinations. Needless to say, this would require laborious millennia-long research, on all those healed by accidental injuries to define all of the acupuncture points.

Thus a mere calculation shows that this theory is hardly realistic. However, suppose the acupuncture points were found by means of one or another method. How then were the channels discovered?

Western medicine questions the channels' existence. The term "meridians," i.e. imaginary lines, is accepted. In communist China of the 1950s, The Manual of the Modern Acupuncture Therapy was published. The author Ju Lian, a professor at the Acupuncture Institute, denies the channel theory and connects the points, including those located on different channels with straight lines — for the sake of convenience (Ju, 1959).

However, the channel theory is the foundation of acupuncture. The Yellow Emperor Classic of Internal Medicine, as well as the other old books, discuss the use of stimulation of the channels without naming the points. In Ling Shu it is written: "Of all principles of acupuncture, the major channels make the beginning" (Wu, 1993). The choice of the points for treatment in general and in Ju Lian's book in particular, is based on the channel theory.

Puzzle of Acupuncture 987: So far, there have been no archeological discoveries or any other sources found where the points are mentioned without anything said about the channels. On the contrary, texts have been discovered, specifying the channels location without mentioning the points (Lu and Needham, 1980). Therefore there is a tendency to believe that channels had been discovered prior to the points (Deadman and Al-Khafaji, 1998). This makes it still less probable that in ancient times an invisible net of channels was discovered and described without any tools or technologies available.

There is an opinion that channels were discovered as a result of meditation or the practice of sexual cultivation, which opened an "inward vision" (Deadman and Al-Khafaji, 1998; Lo, 1998). However, this hypothesis is hardly realistic, considering the complexity of the acupuncture theory.

Are there any scientifically based proofs of the reality of the channel and acupuncture point systems, or is the only evidence the efficiency of acupuncture treatment? In the 1950s, it was discovered that the electrical resistance of acupuncture points is lower than other skin sites (Nakatani, 1956). This fact was confirmed by much research. Resistance values at acupuncture points ranged from 5–50 K |, while that of the other skin sites ranged between 0.5–3 M | (Pomeranz, 1997; Roppel et al., 1975; Havarinen and Karlsson, 1977; Zhu, 1981). The following quote from Ling Shu, written no less than 2000 years ago, is



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relevant: "Those which are called sections or acupuncture points refer to the place where the spirit Qi and its flowing movement, out and in, is unhampered by skin, flesh, muscle, or bone" (Wu, 1993).

A number of experiments have attempted to prove the existence of the channels. However, none of the results look convincing enough (Darras, 1993; Reichmanis et al., 1976). Thus, the existence of acupuncture points specified thousands of years ago has been proven by modern science. It clears the mystical shroud off acupuncture and confirms the system's actual existence.

Was There Evolution of the Acupuncture Theory? Any scientific knowledge implies natural evolution. Therefore, acupuncture historians are trying to trace its development; that is, to define the simple form of the acupuncture theory, which had progressed, becoming more and more complicated. For example, Lu Gwei Djen and J. Needham present a table illustrating the gradual growth of the acupuncture points' numbers in different epochs. In Nei Jing, only 160 points' names are specified, that is 44% of the points known to date. However, considering the points mentioned but not described, the total number of points in this book reaches 80% of the points currently known (Lu and Needham, 1980).

Nei Jing is not a systematic acupuncture course and does not provide a comprehensive description of the points. More attention is given to the channels. Besides, a considerable number of points are hardly ever used for therapeutic purposes. For example, the popular modern acupuncture manual, Acupuncture. A Comprehensive Text, specifies only 174 points, while the other 187 are mentioned in the appendix (O'Connor and Bensky, 1981).

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Zhen Jiu Jia I Jin, written in 282 AD, already describes 349 acupuncture points. Apart from Nei Jing and Nan Jing, Huang Fu Mi also used Therapy of Human Body by Application of Acupuncture and Moxa at the Acupuncture Points to compile his manual. This book, along with possibly many others which were available at that time, is unavailable now (Lu and Needham, 1980).

Modern manuals describe 361 points, a number very close to the 365 total points Nei Jing claims exist. Thus, there is no actual proof of any increase in the number of acupuncture points in the course of historical development.

Another attempt to demonstrate the evolution of acupuncture theory is based on the manuscripts found during archeological excavations. A burial mound, called Mawangdui, was discovered at the beginning of the 1970s. In the Warring States Period (480–221 BC), this place was located in the Chu kingdom. Three tombs were found there. The first one was of marquis Dai, the other two of his wife and son. In the son's grave (he had died in 168 BC at the age of approximately 30), numerous manuscripts written on bamboo and silk were found. Medical notes were found amongst political, military and philosophy texts. They are devoted to shaman spells, herbal recipes and simple surgery. Texts describing the channels but not specifying the points were also found there. These texts do not mention the relationship of the channels to the internal organs, as described in Nei Jing, and only 11 of the 12 channels are referred to (Lo, 1998).

Manuscripts found during the Mawangdui excavation, are from the 2nd century BC, the same period of time in which the activity of the physician Shunyu I (216–150 BC) was recorded. Sima Qian, a historian who lived in the 1st century BC and was Shunyu I's biographer, copied from the archives 25 clinical histories related by Shunyu I, as well as his responses to accusations of malpractice from the Emperor's court. From these materials it is clear that the practitioner, who treated the Emperor's family members, used numerous acupuncture points and channels, including eight extraordinary vessels. For example, this is a part of his reply to the court in respect of one of his pupils: "I taught him the course of the regular tracts and circulation vessels from head to toe, with the pulses corresponding to them, together with the (principles of ) action of the (eight) auxiliary tracts, and all the branches, under abnormal conditions, and of course I had to explain the position of the acupuncture points" (Lu and Needham, 1980).

Therefore, it is hardly probable that the manuscripts found during the Mawangdui excavation, indicate the early stage of acupuncture theory development, when only 11 of the 12 channels had been discovered and there was no concept of the acupuncture points (Lu and Needham, 1980; Lo, 1998). The manuscript, probably a student's notes, does not reflect the real state of acupuncture as it was then. Attempts to demonstrate the evolution of acupuncture in this manner seem to lack



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consistency. What is really important is that the materials, found during the Mawangdui excavation, leave no doubt as to the knowledge of the channels' existence in the 2nd century BC!

Not long ago it was shown in a scientific investigation that the tattoo marks found on the body of the Tyrolean Iceman (the mummy's age is 5200 years) coincide with the classical disposition of the acupuncture points. If so, then the origin of acupuncture dates back to time immemorial, and may have been spread outside of China (Dorfer et al., 1999). PUZZLE OF ACUPUNCTURE 989

Conclusion: Unlike Western medicine, scientists have failed to trace both the origin and the development of acupuncture theory. Having originated before the 2nd century BC and probably in even more ancient times, it never underwent principle change. On the other hand, it has become more and more popular as an effective therapy in the Western world, while the energy channel theory has been partly supported by modern science.

It is hardly probable that this theory, although dating back to ancient times, could have originated in a primitive civilization. Even contemporary science with all its achievements fails to discover and explain the energy channel system, although there is enough evidence to assume it exists.

The origin and development of the energy channels theory does not fit into a traditional development scheme — from simple to complex knowledge. The existence of the theory cannot be explained other than as a product of a highly developed civilization. Acupuncture is not the only evidence of the existence in ancient times of knowledge more advanced than in the modern era. For example, according to the physicist F. Capra, the world view described in the ancient Indian and Chinese treatises, is more realistic than that of all the theories that preceded the 20th century, that is before the theory of relativity and quantum physics came into being (Capra, 1992).

Perhaps serious and intensive research of the energy channel theory might open new horizons as to the cognition of human nature and the progress of medical science.

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# Acupuncture research: from observation to prediction Anatomic structure analysis of acupuncture points"

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The morphological examinations of triggerpoints goes back to 1904 (Stockman). But most known are the researches of Travell&Simons (1976, 1983) who also stated the correlation of a variety of triggerpoints with muscular acupuncture points. Heine (1987) could prove the corresponding of many acupuncture points with nerve-vessel bundles which pierces the superficial body fasciae. A similar anatomical situation can be assumed also for the deep muscular triggerpoints and acupuncture points.

Method: The points TH 15 and St 36 were examined with a digitally encoded ultrasound system with a 12 MHz linear array transducer with a colour flow resolution down to 0,6 mm. After exact needling (De Qui) the depth of the point was measured at the needle and the transducer placed exactly upon the points.

Results: In both points – exactly in the measured depth – an arterial vessel (diameter between 0.6 to 0.7 mm) as a leading structure of a nerve vessel bundle in direction of 80° to 90° towards the skin where detected. In the surrounding of 5 cm no similar anatomical situation could be found. Especially in the point TH 15 the arterial vessel penetrates the deep fascia of the trapecius muscle.





# **Acupuncture and Functional Disorders: A Preliminary Approach**

### François Beyens, MD

Every medical acupuncturist knows that the strength of acupuncture treatments concern mostly the field of locomotor system pathologies. Because some functional pathologies can also benefit from acupuncture, there has been a tendency to integrate acupuncture completely within TCM. However, in this field more than others there are limits to respect regarding the indications of acupuncture. Moreover, the complexity of the treatment proposed in many manuals tends to assimilate points and individual herbs so that the same reasoning can be applied. When looking into the Chinese manuals it is possible to find important common points for many similar functional pathologies, whether of the Excess or the Deficiency type, or even whatever Fundamental Substances are involved. It should therefore be possible to simplify the therapeutical proposals of these patterns by creating general tables or treatment configurations which can be applied to many different patterns, allowing of course for individual adaptations depending on the symptoms.

These are preliminary thoughts on how to organize the acupuncture treatment of functional patterns which have a chance of responding successfully, following the fields of knowledge of traditional acupuncture when they coincide in great part with neurophysiology and avoiding questionable concepts, thereby creating a bridge between the two. In other words, using the acupuncture terminology with a scientific understanding. Ambitious goal, but it could lead to a useful simplification.



# Preventative Acupuncture - Antidepressive Acupuncture Therapy Against Pain Chronification.

# A Multicentric Prospective Study.

### Dr med. Dipl. Phil. Henriette Murakozy

Horstel

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Acupuncture is an effective tool to devoide pain-chronification.

- I. Acute pain, chronic pain, pain disease
- II. Mechanisms of pain-chronification in the CNS (periphery-centre)
- III. Painethiopathology in the TCM disturbances: Yin, Yang, Qi, blood, fullness, emptiness.
- IV Psychopathological processes: depressive development, pain-chronification, disturbances of somatisation.
- V Circulus vitiosis leading to pain-chronification.
- VI MAPS-a bio-psycho-socio-energetic model.
- VII Concept of a multimodal pain management.
- VIII Holistical diagnostic-and therapy plain psycho-somato-socio-kosmogenetic factors.
- IX Theory and praxis of antidepressive acupuncture.
- X Acupunctional chronification-prophylaxis-monotherapy-part of complex therapy.

Study: 1550 patients, interval from October 2002 to May 2004, multicentric, 5 health-care units in Germany, statistical analysis, significancy test.

- 1 Traumatology: fractures of the extremities, perioperative problems, vertebral fractures
- 2 Internistical problems: asthma, sinubronchitis, thoracal pain, cardial problems
- 3 Rheumatology: myogelosis, FMS, sacralgy, arthritis.
- 4 Orthopedy: cervicobrachialgy, tendinopathy, lumbal pain syndrome, arthrosis
- 5 Common medicine: climax, hemicrania, sinusitis, vegetative disturbances.
- 6 Psychiatry: psychosomatical diseases, somatisation disturbances, chronic pain syndrome, drugs, adipositas

Results: acupuncture (as monotherapy or as part of complex therapy regimes) in acute phase of pain can shorten the therapy, minimalise the costs of the management, and the lost days of work. Combined with antidepressive acupuncture, the effectivity of the pain management is significant better. Antidepressive acupuncture prevents the chronification of pain significantly.





# The Missing Link - Auriculohomoeopathy

### Dr Charles Lee M.B.B.S. L.R.C.P (LOND) MRCS(ENG) Dip. HOM

Acupuncture & Homoeopathy are both disciplines of bioenergetic medicine. So, is there a link between them? Do homoeopathic remedies act along similar pathways as acupuncture?

This clinical study of 30 patients with sore throat treated with homoeopathic remedies, applied directly on acupuncture points, helps to provide some answer.

This paper does not attempt to prove how or why homoeopathic remedies work, but assumes that they work; as will be shown later in the clinical study.

Ear acupuncture points are selected in the study for their quick onset of subjective clinical response (within 2 minutes) and hence results can be rapidly evaluated. This is a known clinical fact with ear points, for those of you who practise auriculotherapy.

Pain in sore throat is utilised to evaluate the clinical response and a visual analog scale for pain is used prior to and after treatment with homoeopathic remedies and placebos.

The results are then analysed in this clinical paper. The favourable response (percentage of improvement in throat pain) in fact demonstrates that homoeopathy does elicit a response when correctly selected remedies are applied to ear acupuncture points.



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# Neurocellular Hypoglycia and its Role in Depression and Fatigue

### Dr Katrina Watson MBBS, Dip Obs RACOG, FAMAC

Member ACNEM(nutritional medicine), ACOHM (herbal medicine), ACH (homoeopathy)

The aim of this presentation is to remind doctors of the causes and physiology of hyperinsulinaemia, hypoglycaemia, type 2 diabetes and to explain the background and role of the currently fashionable 'glycaemic index' being added to many food labels. Most importantly, the aim of this talk is to leave doctors understanding the physiology of the neurological effects of hypoglycaemia and hyperinsulinaemia which, when treated, significantly reduce depression, anxiety and fatigue, all chronic and common problems in everyday general practice and which, untreated, go on to have major ramifications in society such as crime, drug abuse and relationship breakdowns.

The treatment involves diet, supplements and acupuncture, the latter being essential for the sugar addiction that otherwise blocks the chance of recovery.





# The Use of Tendomuscular Meridian (TMM) Treatment in Primary Care

# By Dr Philip Soh

The author has deliberately sought out a range of "near surface" and relatively acute conditions to treat, using the TMM as the primary treatment together with a few local point along its course. About 130 patient were treated over a 2 year period and the results of this modality of treatment is presented.

This treatment should be used in all primary care treatments for acute and subacute soft tissue injuries because of its simplicity and efficacy.





# "Acupuncture Management of Frozen Shoulder – A Pilot Study"

### By Dr. David R. K. Lee

Frozen shoulder is an enigma in musculo-skeletal medicine. Its cause is still unknown and there is currently no consensus on its management.

An acupuncture treatment protocol has been developed based on Traditional Chinese Medicine (TCM) and anatomical principles. This protocol was tested with a case series of 20 frozen shoulders from 19 patients comparing acupuncture with the standard western medical management.

Patients in the Darling Downs District were recruited when they presented to their medical practitioners with symptoms and signs of the "Freezing Phase" of frozen shoulder. A demographic survey was used to analyse these subjects. The patients were either given acupuncture by the principle investigator or treated with the standard western medical management provided by their own medical practitioners. Each patient was monitored prior to treatment and at regular intervals with both objective and subjective assessments. The end point of treatment is when the patient attained full range of movement or when the patient decided to leave the study.

Of the 19 patients, there were 4 male and 15 female. Age ranged from 43 – 79 with an average age of 57.75 years. The duration of the condition prior to treatment ranged from 1.5 to 10 months with an average of 5.1 months. Of the 19 patients, 1 female patient returned several months later with frozen shoulder on the opposite side.

There were a total of 20 cases of frozen shoulder: 2 received the standard western medical care and 18 were given acupuncture. In the acupuncture group, only 15 completed the course of treatment with 13 obtaining full recovery.

Preliminary analysis suggests that acupuncture is effective in 13 out of 18 cases receiving acupuncture - a success rate of 72 %.





# Effects of Myofascial Meridian Stimulation Therapy (MMST) on Shoulder Pain

### Seonghyung Cho1,4, M.D.

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Objective: This study is to verify an effect of MMST, a new evaluation and treatment concept, as prepared by integrating the tension tensegrity model of Stephan Levin and the meridian theory of the oriental medicine on patients with a shoulder pain.

Methods: In order to observe MMST's effect on the shoulder pain, 50 patients (male: 18, female: 32, mean age: 53.8) with the shoulder pain were randomly selected and their cases were evaluated and treated by using our own MMST methodology. For each patient, we divided into two groups, as capsular pattern group and non-capsular pattern group. We evaluated MMST's treatment effects on the shoulder pain comparing changes in Visual Analog Scale (VAS) and Range of Motion (ROM) before and after treatment between groups. Results were statistically analyzed by using the independent T-test (SPSS 10.0 for Windows).

Results : Of 50 patients, the capsular pattern group was 22 (44.0%), and the non-capsular pattern group was 28 (56.0%). There was no significant difference in the side, causative factors, duration of the shoulder pain, and any related problems between two groups (p>0.05). As for treatment effects, comparing VAS before and after treatment between the two groups, the mean reduction value of VAS in the capsular pattern group was  $4.5\pm1.3$ . In the non-capsular pattern group, it was  $3.1\pm1.4$ . Thus, the result represents that the effect of MMST to reduce the pain in the capsular pattern group was statistically more significant (p=0.001). Regarding Changes in ROM before and after treatment between the two groups, Mean ROM increase in the capsular pattern group was  $16.9\pm7.2$  degree, the non-capsular pattern group was  $13.6\pm11.2$  degree. The ROM increase after treatment was bigger in the capsular pattern group, but it was not statistically significant difference (p>0.05).

Conclusion: From the above results, MMST proposed by authors had a statistically significant difference on the shoulder pain reduction between the capsular pattern group and the non-capsular pattern group, which is better in the capsular pattern group. And, though statistically not significant, there was better ROM increase in the capsular pattern group than in the non-capsular pattern group. MMST combined prevailing treatment concepts of both East and West is a new effective method of diagnosis and treatment in the care common pain problems arising from musculoskeletal system. All types of practitioners who use needle stimulations as their main treatment modality can benefit from ease of its applications and consistency of its effectiveness.

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# **Acupuncture Treatment for Obesity**

### Dr. Kay Keng Khoo

The prevalence of overweight (defined as a BMI of 25.0 – 29.9 Kg/m²) and obesity (defined as a BMI of 30.0 Kg/m² or greater) is increasing rapidly in the last two decades not only in Australia but in many other countries. The AusDiab study, which surveyed the prevalence of obesity and diabetes between 1999 and 2000 gave a prevalence of overweight and obesity in both sexes in Australia to be almost 60 %. The prevalence of overweight was 29.0 % and that of obesity was 20.8 %. This prevalence for obesity has increased 2.5 times over that of two decades ago. Over the same period in the United States of America, the prevalence of obesity doubled from 15.0 % to 30.9 %. This study compared the weight reduction effect of a diet and exercise regime of reduced energy intake and increased energy expenditure, with the weight reduction effect of this diet and exercise regime plus Acupuncture treatments. It seeks to establish if Acupuncture treatments are effective in suppressing appetite, and whether this effect can be translated into significant weight reduction.

Method. Thirty obese patients, aged over 18 years, who attended a General Practice Clinic, were recruited into the study. Those who were over 120 Kg in weight and those who had debilitating diseases were excluded. Fifteen randomly chosen group one patients went on a diet regime, consisting of reducing their usual diet intake by one third and limiting their daily fat intake to 50 gm. They were asked to go on an aerobic exercise program of their choice of twenty to thirty minutes three times a week. Fifteen randomly chosen group two patients went on a similar diet and exercise regime and were given, in addition, twice weekly Acupuncture treatments for five weeks.

Results: The results of the trial are tabulated below.

Summary of characteristics of control and treatment groups

	CONTROL GROUP	TREATMENT GROUP
Male : Female	3:12	3:12
Mean age	49 years	47.9 years
Age range	(19 - 79 years)	(25 - 67 years)
Mean weight	96.4 Kg	95.7 Kg
Weight range	(78 - 120 Kg)	(77 - 118 Kg)
Mean BMI	36.19	35.37
BMI range	30.14 - 43.86	30.07 - 42.81
Total weight loss	28 Kg	69 Kg
Average weight loss	1.87 Kg	4.60 Kg
% weight loss	1.94%	4.80%

Discussion: This study seeks to verify the hypothesis that Acupuncture is effective in suppressing appetite to such an extent that it can be translated into observable weight loss over and above that achieved by a diet and exercise regime of reduced energy intake and increased energy expenditure. The two groups were matched for age, initial weight and BMI. The total weight loss for the control group was 28 Kg, with an average weight loss per patient of 1.87 Kg, or 1.94 % of weight loss. The corresponding figures for the Acupuncture group were 69 Kg for total weight loss, 4.60 Kg or 4.8 % of weight loss per patient. The difference in weight loss between the two groups is extremely statistically significant (p<<0.05).

While there are numerous reports on the effects of Acupuncture on obesity, many are of poor scientific quality. Four reports will be reviewed here, two with negative outcome and two with positive outcome. One randomized, placebo controlled trial was conducted on 96 subjects, in which treatment subjects wore an auricular acupressor device for 12 weeks, while control subjects wore the device on their wrists. In another randomized control trial of 24 subjects, treatment subjects received auricular acupuncture for 9 weeks, while control subjects did not. Both trials gave negative outcome in weight loss. In one randomized control trial of 60 overweight subjects, treatment subjects wore AcuSlim device (consisting of a small battery

# ABSTRACTS

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operated pack) on the ears, while control subjects wore the device on their thumbs. After 4 weeks weight loss was significantly greater in the treatment group. Another randomized control trial of 20 subjects, all received a diet of 2000 calories/day and daily walking. In addition, the treatment subjects received ear acupuncture while control subjects did not. After 8 weeks, weight loss was significantly greater in the treatment group. The present study does not merely measure the effects of suppressing appetite on weight loss, but the effects of suppressing appetite in enhancing weight loss in a diet and exercise regime.

Conclusion: Acupuncture treatment aimed at suppressing appetite was more effective in causing weight loss in patients receiving a diet and exercise regime of reduced energy intake and increased energy expenditure than in patients receiving the same diet and exercise regime only.





# Topic 1: Diagnostic and differential diagnostic of pathologic processes stages.

### Dr. Olga Safonicheva

Moscow Medical Academy by I. M. Sechenov, Postgraduate Faculty, Department of Natural Medicine.

Early diagnostic of pathologic processes stages appears to be difficult for doctors since patients do not apply for inspection only when they have functional transient complications.

From the other side, instrumental and laboratory diagnosis often reveal morphological changes in organs that are not inverse and correspond to chronic pathological process.

Definite changes in soft tissues appear in the early stages of diseases and it is possible to determine them, using method, integrating manual technique and principles of acupuncture.

Materials and methods: Ninety five patients with different internal organs diseases, who had definite diagnosis and pathological process stages and apparently healthy people without complains were examined.

Similar changes were revealed, by using palpation of soft tissues in segmental zones of visceral organs and representatives zones of energetic meridians located in distal regions of extremities.

Clinical observation allows us to offer some statements for discussion.

Results: Relocating the skin in fold we find out that the condition of the skin fold reflects the changes in visceral organs that correspond to 3 stages of pathological process. We call it the palpatory meridian test.

- 1. Preclinical stage stage of initial period of illness: elastic skin fold becomes thicker and less mobile.
- 2. Clinical stage stage of the functional effort of the intrinsic restoring mechanisms: elastic skin fold becomes thicker, less mobile painful and skin blushing.
- 3. Chronic stage stage of the structural changes in the internal organs stage of intrinsic restoring mechanisms exhaustion: skin fold becomes less mobile and fragmented. Some parts are thick, dense and painful, others are thin and less dense.

Conclusion: There is direct correlation between structure and function: there cal be no abnormal function without any abnormal structure. Manual diagnosis allows to reveal changes in soft tissues at the early stages of pathological process and special soft tissue techniques enable to prevent the development of deep visceral diseases and complications





# **Preventive Acupuncture by Rhinitis Allergies**

### **Dr Pesztenlehrer MD**

The author has summarized his experiences of more than 20 years with the acupuncture treatment of rhinitis allergica with the conclusion, that acupuncture is suitable not only for treatment, but also for prevention of rhinitis allergica.

Recently, his observations are also supported by performed scientific studies (increase of several lymphocyte subpopulation : CD3+T cells, CD4+T cells, change in cytokine concentration, IL-6, IL-8 etc.).

# **Endometriosis Abstract**

### Dr K. S. LAU

Endometriosis is a condition which affects more than 15 % of women in their reproductive age. It may cause dysmenor-rhoea which can be intolerably severe, infertility and disability.

Conventional treatment using hormonal treatment is not always successful. Recurrence often happens even after repeated surgery.

The combination of Acupuncture and Chinese herbal medicine offers another option for treatment. Cases that have not been successfully treated with hormones and surgery have been treated with good results.



# Diagnosis and Treatment of Pain using Myofascial Meridian Stimulation Therapy(MMST): A New Concept

#### Dr K.S.Lau

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Abstract: There have been various attempts to treat musculoskeletal pains using needle stimulations around East and West. Among them, trigger point concepts developed by Janet G. Travell and David G. Simons and Meridian Concepts coined from Traditional Chinese Medicine (TCM) are considered as two mainstreams in the practice of contemporary acupuncture. But practical point of views, most practitioners agree upon the difficulties in choosing exact trigger points and in subjective interpretations of various diagnositic methods(especially pulse diagnosis) used in TCM meridian concepts. In this paper, a new concepts of Myofascial meridian Stimulation Therapy (MMST) 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 MMST, the theory of Tensegrity (Tension + Integrity) proposed by Stephen M. Levine and anatomy of myofascial connections and its meridian relationship proposed by Thomas W. Myers are adopted to explain the methods of assessment (which will be called Myofascial Meridian Test). And 12 Meridian theory and its major acupuncture points coined from Traditional Chinese Medicine are to be used in the treatment of musculoskeletal pain.

Through this new method of assessments and treatments, practitioners who dealing with musculoskeletal pains with needles, be it MD's or acupuncturists, can benefit from ease of its applications and consistency of its effectiveness.

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# POSTER PRESENTATIONS



# **Some Somatic Markers of Infertility and Acupuncture Therapy**

#### Baresova, M.

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(Presenting author: M. Bare\_ová M.D.)

Women-patients suffering from infertility may have various somatic symptoms. The presence of some of them can signalize the pathogenesis of disorder acording to the TCM and / or modern medicine and improvement of it shows the effectiveness during the therapy.

According to these somatic markers we can differ four groups:

- 1. with darkness of hair above upper lip as a sign of androgen supremacy, in TCM signalise "insufficiency of kidney", and by therapy turns light
- 2. with infiltration of the subcutis in sacral region, which signalises hormonal dysbalance and by therapy diminutes
- 3. with painfull end of coccyx when palpated and asymmetric hypertone of thigh adductors, and asymmetric one-sided hypotone and the other-sided hypertone of a part of abdominal wall in the region below the navel with opposite situation above the symphysis which all together signalises disorder of pelvic-bottom muscletone, and by therapy turns symmetrical.
- 4. without special markers

Case serie include 91 women-patients, (coming after others ineffective procedures) treated with acupuncture and if it was indicated, a complex therapy was used: acupuncture, auriculotherapy, cupping, manual medicine, homeopathy.

From the total number of 91 women-patients 65 patients got pregnant, i.e. 76,3%. Period of treatment to onset the gravidity varied from 2 weeks to 2 years, usually from 3 to 6 months. During pregnancy patients were controlled, some were treated. A part of these patients got pregnant after 2-3 years, without any further therapy (they are not included in successfull group). The age of pregnant patients was 22 - 42 years.

The gynecological status was in part normal, other patients suffered from chronic inflammations, primary amenorhhoe, hyperprolactinemia, or were after some gynecological operation or instrumental abortion in past, etc. A great part of patients in the fourth group suffered from immunity disorders.

The failure of the therapy:

- 1. The "insufficiency of the TCM kidney" was too deep and not influenced enough by therapy
- 2. The high prolaktinemia
- 3. The unknown origin.

Conclusion: Acupuncture and auriculotherapy, completed by cupping, manual medicine and homeopathy gives good results in the therapy of infertility.

My acknowledgement to R. Jáno\_ka M.D. and M. Jel\_ík M.D. for participation in case series.

## A Study of Statistical Diagnosis for Ryodoraku (EMI) Measurement

#### Endo, Hiroshi

Hiroshi Endo 1,2), Wang Cai Yuan 1), Shigeyuki Kanai 1,2), Hideaki Higashino 2).

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Aim: Ryodoraku (Electro Meridian Imaging <EMI>) measurement applies body surface (skin) electrical phenomena as objective meridian diagnosis. But the phenomenon is the measurement value (current) constituted by multiple factor, and accurate diagnosis and assessment are not easy. Our studies are development of new diagnosis that applied multivariate analysis to Ryodoraku measurement at present. We performed long-term acupuncture treatment and Ryodoraku measurement for a patient, and studied fluctuation of the Ryodoraku current with principal component analysis.

Methods: One patient of chronic lumbago (64-year-old, female) is subject. We treated acupuncture with an interval of one / week for the subject, and continued that for 20 weeks (for 5 months). BL23 / BL25 / BL51 / BL54 (8 points of right and left) selected us as acupoints in every treatment. We confirmed that "Deqi" by prickle acupuncture, and kept needle for 15 minutes in those points. Subject was measured Ryodoraku current with skin ammeter (D-401 <NR company>) before every treatment. 12 V, 200 micro ampere (in bypass) electricity was passed on representative measurement point with approximately 1 cm2 cotton wet electrode (the cathode), and the current after 0.75 sec was decided as Ryodoraku measured value. Each Ryodoraku current (variable) performed principal component analysis using SPSS 11.0J for Win (statistics SOFT). We analyzed Principal Component (PC) that indicated eigenvalue more than 1, accumulation contribution ratio around 70 %.

Results: We selected eigenvectors of 1st - 3rd PC in analysis. In eigenvectors of 1st PC, only left KI (F3L) value was extremely low negative, but the others were positive. Eigenvectors of 2nd PC were divided into each positive / negative value to the upper limbs and lower limbs. Eigenvectors of 3rd PC were specifically divided into positive / negative value to each Ryodoraku of the whole body. In each PC, HT (H3), SP (F1), KI (F3), BL (F4) and GB (F5) were high value eigenvectors comparatively.

Discussion and Conclusion: First PC is the factor that each Ryodoraku current fluctuates equally, and we consider general electric resistance factor that seems to be warm temperature sweat gland secretion or horny layer moisture content of whole body skin in physiology. 2nd PC is the phenomenon that hand / foot Ryodoraku currents are divided into each, and we consider the factor that can not explain that in physiology. Furthermore, 3rd PC is the factor that each Ryodoraku current fluctuates individually, and we consider the factor that can not explain this phenomenon too in physiology. As for these factors, we consider a specific phenomenon to appear with Ryodoraku measurement. It is considered Ryodoraku current related to lumbago, HT (H3), SP (F1), KI (F3), BL (F4), GB (F5) and all Ryodoraku current rose along frequency increase of the treatment as clinical evaluation by this analysis for this patient. Ryodoraku researchers understand that these phenomena (factors) appears in lumbago affection by experiences already. But our Ryodoraku diagnosis and clinical evaluation will become more objective / scientific if apply principal component analysis (eigenvectors appearing with 2nd and 3rd PC).

# Prevalence of Dental Foci and their Imapct on Chronic Diseases Encountered in 490 Patients

#### Birgit Kluger, MD, DDS, Wolf Kluger MD, DDS.

The idea has long been established that there is a conjunction between oral diseases and the general health status. Typically the oral cavity and its surrounding tissues offer a multitude of possible locations for chronic inflammation. These foci may set off or sustain diseases even in organs that are located at a great distance from the interference field. If the patient fails to respond to acupuncture or related techniques, or in the case of repeated relapses although the initial treatment has been successful, one has to consider that a focus might be present.

In order to assess the impact of dental foci 490 employees of a large company in the eastern part of Austria were examined with respect to oral health, the presence of general diseases and a history of pathologies which point to chronic inflammatory processes.

All employees underwent a thorough clinical examination of their oral cavity and temporo-mandibular joint including occurrence of caries, fillings, crowns, missing teeth with/without substitution etc., vitality test of the teeth and test for gingivitis and periodontitis. Also x-rays were done and examined for possible inflammations and periodontal lesions as well as impacted teeth. A special concern were dead and/or root-canal-treated teeth with asymptomatic chronic inflammation which constitute the most stubborn foci in the head and neck region.

75% of the employees exhibited at least one devital tooth with an endodontic treatment, 40% had periapical lesions! 80% of the employees suffered from gingivitis or periodontitis. Also in the x-rays numerous impacted wisdom teeth with signs of coronal cystitis/inflammation were spotted. A significant relation between dental foci and the occurrence of chronic painful disorders of the skeletal system (joints, muscles) was found.

In conclusion the abundance of dental foci in conjunction with degenerative disorders of the skeletal system found in this survey should rouse our interest especially in those cases where routine medication and alternative medicine had no effect (e.g. painkillers, antirheumatic therapy, acupuncture). Interference fields can compromise the therapy outcome of acupuncture regimens and other alternative techniques. Dental foci should always be considered and checked for in therapy-refractive cases.

# The Clinical Observation on 1 Case of Alopecia Areata with Headache

#### **Won-Chul Lee**

Dept. of Internal Medicine, College of Oriental Medicine, Dongguk University

Objective: The alopecia areata is mottled or confluent alopecia occurs in the scalp or body. The cause of alopecia areata are hereditary, psychotic, and immunological disorders. Unfortunately, the clinical features and therapeutic results of alopecia areata are variable and unpredictable. The propose of this study is to report the effect of acupuncture therapy to the patient of alopecia.

Methods: We have treated a 61-years old man who had suffered from Alopecia areata with Headache. The main reason of his symtom was from the death of his mother and Economic difficulty. So we thought his main cause is the stress. We based on the ancient chinese medical literature and applied at GV20, GV23, GV24, S8, GB8, GB20, HN46, PC6, CV12, ST36, L14 and LR3 with Infra-Red from 2001-4-7 to 2001-7-13. The western medicine was hold after acupucture therapy.

Result: The VAS score of headache was improved from 10 to 2 within 10 days and the alopecia area was decreased from 23.55\_ to 1.54\_ during 9weeks. The alopecia area and headache were almost reduced by acupuncture therapy, but the hair density was 70% in comparison with normal area.

After treatment of acupuncture therapy taking western medication is completely self controlled. Only with acupuncture therapy the condition of disease can be improved .

# Para-Chlorophenylalanine selectively interferes with electroacupuncture and moxibustion-induced gastric emptying in rats.

#### Martin, Fernanda.

GISELE C. M. SUGAI (1), ANAFLÁVIA O. FREIRE (1), MARIA FERNANDA G. MARTINS (1), ANGELA M. F. TABOSA, (2), LUIZ EUGÊNIO A. M. MELLO (3) 1, 2) Division of Chinese Medicine and Acupuncture, Dept. of Orthopedics and Traumatology, Universidade Federal de São Paulo (UNIFESP) -Brazil. 3) Dept. of Physiology, Universidade Federal de São Paulo (UNIFESP) -Brazil

Background: Serotonergic neurons of the mioenteric and submucous plexus, are major participants in the gastrointestinal physiology.

Electroacupuncture (EA) as well as moxibustion stimulation has been reported to produce an excitatory effect on the gastrointestinal motility of the rat. Here, we compared the outcomes of the stimulation of a specific set of acupoints with either

acupuncture or moxibustion over the gastrointestinal motility and the role of serotonin (5-HT) in this effect. Methods: To analyze the role of 5-HT on the gastrointestinal motility of the rat, we studied the flow of 25 glass beads administered to the stomach, after treatment of the animals with para-chlorophenylalanine (pCPA). Acupuncture stimulation was performed on acupoints St-36 (Zusanli) and Sp-6 (Sanyinjiao) with electrical stimulation or on acupoints Ren-10 (Xiawan), Ren-12 (Zhongwan) and St-25 (Tianshu) with moxibustion. Animals subjected to sham stimulation were used as controls in addition to naïve unstimulated animals.

Results: Stimulation of the hindlimb (St-36 and Sp-6) and abdominal (Ren-10, Ren-12, St-25) acupoints resulted in effective gastric emptying, as compared to sham stimulated animals. Pre-treatment of animals with pCPA abolished the response provided by acupuncture stimulation in both animal groups (subjected to hindlimb or to abdominal stimulation).

Conclusion: Our data suggests that physiological responses other than acupuncture-induced analgesia also depend on sero-tonin to be adequately evoked. In addition, our data suggest that this involvement of serotonin is a general aspect of acupuncture's mediated effects over the gastric emptying of the rat.

KEY WORDS: electroacupuncture; gastric emptying; moxibustion; pCPA; rats; serotonin.

# Effect of Moxibustion in the Acupoints Ren-12 (Zhongwan), St-25 (Tianshu) and St-36 (Zuzanli) in the Prevention of Gastric Lesions Induced by Indomethacin in Wistar Rats.

### MARIA FERNANDA G. MARTINS (1), ANAFLÁVIA O. FREIRE (1), YSAO YAMAMURA

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Background: Since remote times men has been using heat to stop pain and even cure diseases. Moxibustion therapy constitutes part of the treatment with acupuncture, and its basic principle is to warm acupuncture points, by the combustion of Artemisia vulgaris. This therapeutic technique is very useful to treat various conditions. This study was aimed to assess the mechanism of action of moxibustion in acupuncture points Ren-12 (Zhongwan), St-25 (Tianshu), St-36 (Zuzanli),

in preventing acute injuries of the gastric mucosa induced by indomethacin in Wistar rats. Methods: This work comprised five experiments, all of which characterized by the induction of gastric lesions, by means of the intragastric administration of indomethacin

(20mg/Kg) followed by the treatment of and analysis of the remaining gastric lesions. Results: The first and second experiments showed that moxibustion significantly prevented gastric lesions triggered by indomethacin more efficiently at 600 C than at 450 C. The MOXA group in the second experiment had a mean lesion area, which were 8.4 times significantly less than the INDO group and 2 times significantly less than the SHAM group (stimulation of a non acupuncture point). The third and fourth experiments showed that burning of dry leaves of Artemísia vulgaris was significantly more efficient in preventing gastric lesions than moxibustion made with Artemísia charcoal, tobacco (cigar) or by heating with a water pad. The fifth experiment showed that desensitization of the afferent sensory C fibers by capsaicin partly stopped the effect of moxibustion in blocking the lesions in the gastric mucosa. Conclusion: Moxibustion can efficiently prevent indomethacin-induced gastric lesions and this effect is dependent on temperature, the material that is used for moxibustion, the use of acupuncture point and the integrity of C fibers.

Key Words: gastric lesions; indomethacin; moxibustion; acupoints; neuronal C fibers

# Effects of acupuncture points St-36 (Zusanli) e SP-6 (Sanyinjiao) on the inflammatory post traumatic process of femurs surgery in wistar rats

### Ysao Yamamura; Iran Freire Cavalcanti; David Calado Vieira; Angela Tabosa, Maria Fernanda G. Martins.

Division of Chinese Medicine and Acupuncture Department of Orthopedics and Traumatology Universidade Federal de São Paulo (UNIFESP) - Brazil.

The inflammatory process includes a series of events that could be provoked by many stimuli. Acupuncture has anti-inflammatory effects in lesions caused by chemical and thermal agents, but it effects on post-surgical trauma is not well known yet. Our goal was to investigate the anti-inflammatory action of electroacupuncture in the post operated femur fracture in wistar rats. We studied 41 wistar rats that were submitted to manual femur fracture, followed by reduction and fixation, under anesthesia. The rats were randomized in 5 groups:

- 1 Control Group (N=8) Just fracture and surgery 2 Surgery / Anesthesia Group (N=8) Fracture and surgery followed by 20 minutes of ether anesthesia, twice, after the surgery and 12 hours later.
- 3 Surgery/ Anesthesia / ACP 1 Group (N=8) Fracture and surgery followed by 20 minutes electroacupuncture section (2Hz / 50mA) in ST-36 and SP-6 points, under ether anesthesia, twice, after the surgery and 12 hours later.
- 4 Surgery / Anesthesia / ACP 2 Group (N=8) Fracture and surgery followed by 20 minutes electroacupuncture section (2Hz / 50mA) in other acupuncture points not referred as having anti-inflammatory effects, under ether anesthesia, twice, after the surgery and 12 hours later.
- 5 Surgery / Anesthesia / SHAM Group (N=9) Fracture and surgery followed by 20 minutes electroacupuncture section (2Hz / 50mA) in points not referred as being acupuncture points, under ether anesthesia, twice, after the surgery and 12 hours later.

All the rats were sacrificed 24hours after the surgical procedure. The treated paws were removed and their volume was measured. The Surgery / Anesthesia / ACP 1 Group, where ST-36 and SP-6 acupuncture points were used, showed a significant anti-inflammatory effect (p<0,05 / Fisher PLSD), when compared to the other groups. This result suggests that this acupuncture method could represent an important tool in traumatisms.

# Chunghyul-Dan (Qingxie-Dan) Improves Arterial Stiffness in Patients with increased baPWV

# Seong-uk Park, Chang-nam Ko, Woo-sang Jung, Sang-kwan Moon, Ki-ho Cho, Young-suk Kim, Hyung-sub Bae, Kyung-sub Lee

Department of Cardiovascular & Neurologic diseases, College of Oriental Medicine, Kyunghee University, Seoul, Korea

Background and Purpose: Pulse wave velocity(PWV) reflects arterial stiffness and is the marker of severity of vascular damage and prognosis of cardiovascular diseases.

Chunghyul-dan is a herbal formulation consisting of Hwangyeonhaedog-tang and Rhei Rhizoma. Recent studies have reported that it had anti-hyperlipidemic and anti-oxidative activities.

This study was conducted to evaluate the effect of Chunghyul-dan on arterial stiffness in patients with increased brachial-ankle pulse wave velocity (baPWV).

Methods: 10 patients with increased baPWV(>1400cm/sec) were recruited into the study. Subjects were treated with Chunghyul-dan (1800 mg per a day) for 8 weeks. Blood pressure, fasting blood glucose, lipid parameters, ankle brachial pressure index(ABI) and baPWV were measured before and after treatment. ABI and baPWV were measured using the recently developed device, VS-1000(Fukuda denshi, Japan).

Results: baPWV was significantly decreased after Chunghyul-dan treatment(1736.0±271.1cm/sec versus 1599.0±301.9cm/sec, p=0.032). There were no significant changes in blood pressure and lipid parameters. No correlation

was found between the effect of Chunghyul-dan on arterial stiffness and changes of blood pressure or LDL cholesterol

Conclusions: This study provides the evidence for a significant improvement of arterial stiffness made by Chunghyul-dan treatment in patients with increased baPWV.

Key words: PWV, Chunghyul-dan, Atherosclerosis, Arterial stiffness

The Uighurs were amongst the very first people to practise acupuncture. The Chinese learnt from this ancient culture. This is a comprehensive poster presentation to trace the beginnings of acupuncture.

Residi, Nimetullah.

### Diagnosis and neural therapy in vertigo

#### Wander, R.

The symptom of dizziness occurs with an impulse discrepancy from right to left of the organ of equilibrium, with the eye control and the proprioception of the vertebral column. The examinations according to Hautant and to de Kleyne and the trial of positioning are discussed as programme for diagnosis.

The neural therapeutically influence is shown by reflex transmission.

Neuraltherapy: 1. Osteovisceral conduction and jaw joint Ear points"

Washing over the temporal bone + sutures Injection at the jaw joint + masseter muscles Injection into the wisdom tooth area

- 2. Sympathetic irritation Injection at the stellatum ganglion Injection at the superior cervical ganglion Injection at the carotid artery Injection at the vertebral artery
- 3. Parasympathetic irritation Injektion at the sphenopalatine ganglion Injection at the otic and/or submandibular ganglion Injection at trigeminal nerve exit points
- 4. CS Weal's of dermatomes C 3, C 4

Injection at the atlas transverse process and vertebral artery , Injection at process C 2, Injection at the greater and lesser occipital nerve, Injection at the great auricular nerve ,Injection at the accessory nerve ,Injection at the sternocleidomastoid m. and the levator muscle of the scapula

5. Treatment of interference field

Injection at all PNS ,Injection at teeth ,Injection at the tonsil poles ,Injection at the abdominal organs ,Interference fields in whole body

The elimination of disturbing fields helps to remove blocks of the cervical vertebral column, the following Chirotherapie is facilitated and relapses are inhibited.

# Mechanism of Reversal of Laryngospasm by Median Nerve Stimulation—A Electrophysiological study.

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ABSTRACT Mechanism of Reversal of Laryngospasm by Median Nerve Stimulation—A Electrophysiological study. Sheng G. Yin, MD, Yun Sun, MD\*, Frederick J. Stucker M.D. FACS

Laryngospasm is a critical condition, with an incidence of 8.7/1000 for all age groups and 95.8/1000 for children with an upper respiratory infection. If not diagnosed correctly and treated promptly, it makes ventilation of patient's lungs difficult and can lead to hypercarbia, hypoxia, cardiac collapse, and even death. Clinical studies showed that in some cases severe complications (e.g. pulmonary edema) are possible and are often unrecognized or misdiagnosed.

Laryngospasm is characterized by hypopharyngeal spasm, sudden onset, and paradoxical, profound adduction glottic movement triggered by superior laryngeal nerve (SLN) stimulation. Studies of possible treatments have focused on interfering with the laryngeal reflex arc. Actually the pathophysiological changes in laryngospasm may involve the vagal reflex. In laryngospasm episodes, therefore, cardiopulmonary changes may be a result of vagal reflex and prolonged glottic adduction, which itself can cause upper respiratory collapse. It may be possible to control a series of pathophysiological changes by interfering with central processing instead of blocking the peripheral pathophysiological loop.

In Traditional Chinese Medicine, acupuncture has often been used to terminate laryngospasm, but the basis of the therapeutic effects awaits investigation. The technique is to apply pressure with one's thumb to LI 04 and with the index finger to PC 08 simultaneously (Fig 1). Li et al has reported that low-current electrical stimulation of PC 06 or the median nerve had the same effects of inhibition in a rabbit model. Therefore, median nerve stimulation (MNS) seems to mimic stimulation of the pericardium meridian from PC 06 and PC 08 in traditional acupuncture.

Methods: Three 15-20 kg adult dogs (2 males, 1 female) were used. Animals were anesthetized with intravenous Nembutal (25 mg/kg) and supplemental anesthesia was administered with Nembutal (15 mg/kg) intravenously at approximately 90-min intervals to maintain the anesthetic level.

The optimal level of anesthesia was controlled using the following criteria: (1) absence of voluntary movements, (2) presence of the corneal reflex, (3) inspiratory movement of both vocal folds, and (4) absence of diaphragmatic EMG activity. A midline incision in the anterior neck was made and the strap muscles retracted to expose the trachea and tracheoesophageal grooves. A tracheostomy was performed at the 4-5th tracheal ring. The dogs will be inserted transorally with a three-channel device for the application of (1) instillation of acid solution, (2) observation of the glottis with a flexible videolaryngoscope and (3) suction secretion (Fig 2). In order to mimic PC06 acupuncture stimulation, two needle electrodes 10 mm apart were inserted at the 1/6 of right forearm distally, serving as MNS and was adjusted to produce a slight twitch in the extremities, at a frequency of 2 Hz. The intensity of stimulation was at 2x threshold for the first detectable muscle twitch. The average value of 2x threshold was 1.3 mA.

Responses in TA and the diaphragm were recorded in baseline activity of load-airway, acid-solution (pH 2.0), and control solution (pH 7.0). Each time hyperexcitability of TA was recorded following acid application, the supraglottic area was suctioned and the endolarynx rinsed three times with phosphate-buffered saline (pH 7.4).

Results: The pattern of TA EMG in response to acid solution (pH 2.5) indicates consistent contraction, lasting 1100-1500 ms with maximum amplitudes of 800-1000 mv, but no changes in response to control solution (pH 7.0) in which both vocal folds maintained more adduction than seen in the laryngospasm. During normal breathing, MNS did not change TA EMG but increased duration of inspiratory firing in the diaphragm EMG. After 5 minutes of MNS the TA activity to acidic solution was absent or significantly inhibited, but inspiratory bursting was found in the diaphragm.

Discussion: MNS not only reversed hyperexcitability of the TA but also enhanced diaphragm activity. If this effect is due to the same mechanism as PCA, there seems to be top-down regulation of TA, PCA, and diaphragm activities. A peripheral mechanism can be ruled out since different anatomical pathways are involved. The observation of PCA in experimental laryngospasm condition is interesting, and the role of airway surface liquid on reflex responses in experimental laryngospasm condition also deserves attention. In conclusion, hyperexcitability of TA triggered by acid solution (pH 2.5) in dogs can serve as an animal model of laryngospasm; and this type of artificially induced laryngospasm can be terminated by MNS without interfering with normal reflexive responses, suggesting that the mechanism of acupuncture involves top-down modulation in achieving the reversal of laryngospasm.