



# Neuraltherapy

## the therapeutic use of local anesthetics

### Definition, indications, way of administration, pathophysiology, future

Neuraltherapy (neural therapy) is the diagnostic and therapeutic use of local anesthetics. There are multiple interrelations between neuraltherapy and acupuncture. Both of them are forms of regulatory therapy which influences the whole organism, thus following an holistic approach.

The Indications of neuraltherapy can be classified into four different groups:

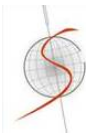
- acute pain and chronic pain disorders
- functional disorders without organic findings
- vegetative (systemic) disorders
- chronic inflammation.

Neuraltherapy can be administered in at least five different ways. Similar to acupuncture, two or more of them are combined in most therapy regimes.

1. local infiltration.  
injections , frequently used in therapy of acute and chronic pain.
2. segmental therapy.  
This form of neuraltherapy resembles needling of the bladder meridian in acupuncture, exploiting segmental reflexes and referred pain mechanisms. Administration of wheals and infiltrations into trigger points are the main techniques in this group.
3. regional therapy, i.e., nerve and ganglia infiltration.  
Some syndromes are induced or maintained by sympathetic overweight. Injection of local anesthetics into the respective ganglia can re-establish the autonomic balance. A well-known example is *Sudeck's Atrophy* (Reflex Sympathetic Dystrophy Syndrome, or Complex Regional Pain Syndrome, CRPS).
4. systemic infusion therapy  
for chronic pain disease, tinnitus, and prevention of post-surgery ileus.
5. neural therapy of the fields of disturbance  
The most sophisticated use of neural therapy  
A disturbance field is defined as “any structure of the body being asymptomatic but inducing or maintaining another disorder by remote effects”. Important examples are scars, as well as organs with chronic inflammation, especially teeth, sinuses, and the pharynx. The autonomous nerve system (ANS) seems to play an important role in information transfer from the disturbed area to the target region of complaints. Fields of disturbance can be temporarily or permanently eliminated by injections of local anesthetics.

A number of studies has revealed the molecular mechanisms of neuraltherapy. Local anesthetics have multiple effects, e. g., induce Gq-protein-complex mediated intracellular anti-inflammatory mechanisms, de-activate overactive granulocytes, and have a sympathicolytic effect by neurophysiological circuits.





However, there is a gap between the frequent use of neuraltherapy in Central Europe and a obvious lack of clinical studies. The usage of local anesthetics in therapy for over hundred years all over the world supports the hypothesis that neuraltherapy is an important, effective, and efficient therapy with little side-effects.

