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- Born 1951 in Vienna
- Medical Promotion: 1977
- Board certified as an orthopaedic specialist: 1983
- 1994 - 2007 Head of the Department for Orthopedic Pain Therapy (Herz Jesu Hospital, Vienna)

Acupuncture:

- Since 1978 member of the Ludwig Boltzmann Institute for Acupuncture/ Johannes Bischko Institute. (Head: Prof. Dr. J. Bischko followed by Prof. Dr. H. Nissel and Dr. Karin Stockert)
- Since 1983 board member of the Austrian Society for Acupuncture.
- 1981 Alfred Pischinger Scientific Award
- 1983 Organization: Acupuncture World-Congress in Vienna (Hofburg)
- 1989 Organization: International ICMART Symposium in Vienna (Old AKH)
- 1992 - 1994 President of ICMART (International Council of Medical Acupuncture and Related Techniques, Brussels)
- 2000 Organization: ICMART World-Congress in Vienna (Palais Auersperg)
- 2013 Organization: International ICMART Congress in Vienna
- For many periods between 1986 and 2012 Vice-President of ICMART
- After more than 30 years retired from the ICMART board 2015

Neural Therapy:

- Since 1994 board member of the Austrian Society of Neural Therapy
- Since 2011 President of the Austrian Society of Neural Therapy
- Since 2015 deputy director of IFMANT (International Federation of Medical Associations of Neural Therapy)

Sonographic Studies of Acupuncture Points / Trigger Points. Practical Proceedings.

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Basis of any diagnosis and therapy in the acupuncture and neural therapy are the detailed medical history, the observation of patient reactions and the palpation of superficial and deep structures. Muscular trigger points which quite often are the cause for pain radiation to distant areas are important for the diagnosis and treatment of pain syndromes of the musculoskeletal system.

Findings and descriptions of trigger points are found in scientific papers since more than 100 years. The standard work is considered to be the "Trigger Point Manual" written by *J. Travell and D. Simons (1983)*. *R. Melzack, D. Stillwell and M. Fox* already in 1977 noticed that acupuncture points are corresponding with trigger points. *P. T. Dorsher (2006)* was able to show that more than 90% of the typical trigger points, mentioned by *Travell and Simons*, are related to the anatomically appropriate acupuncture points. (Although trigger points can develop also in other parts of the musculature.) More than 70% of these points showed a correlation of meridians and the myofascial pain radiation. *H. Heine (1987)* was the first who recognized and described that at these points neurovascular bundles perforates the superficial fascia. *H. Liertzer* found by sonographic studies of typical acupuncture points that neurovascular bundles also perforate the deep fascia exactly where the points are located.

Method:

The following points, which are anatomically easy to reach were used: TH 15 (TP of m. trapezius) and St 36 (TP of m. tibialis ant.) These acupuncture points were located according to the guidelines. The acupuncture needles were inserted till Deqi feeling was reported. The points were marked and after removing the needle the ultrasound transducer was positioned exactly over the marked points. (We used a GE Logiq 700 PRO with a 12 Mhz transducer, later a GE Logiq S7 PRO with a ML 9-15 transducer.) The anatomical situation we found was the same for all 5 students. A thin arterial vessel can be visualized in the deep fascia. At exactly the point above which the trigger point was to be assumed due to needle localization, the vessel penetrates the fascia and was traceable into the muscle.

Hypothesis:

It can be indeed possible that the stenosis of the blood flow through the hypertension of "tense" muscles leads to a local hypoxia and an edema activating the trigger points. Other activating factors such as an overload, overstretching or trauma will result in a local lesion with a partial rupture of the sarcoplasmic reticular tissue, a dysfunction of the motoric end organ releasing a permanent Ca²⁺ - ion current which will lead to the so called "rigor complex" the trigger point, which is accompanied by a hypoxia leading again to an edema. In long lasting chronic cases the permanent hypoxia will result in irreversible changes of the connective tissue and fascia. (*U. Böhni R. Gautschi*).

If we compare trigger points in the "Triggerpoint Manual" with the localizations of typical muscular acupuncture points, a few localizations are different. As an example, SI 11 (*Tianzong*, TP of m. infraspinatus) should be mentioned. In the "Triggerpoint Manual", 3 points are marked in the M. infraspinatus, none of which is corresponding with the localization of SI 11. With the help of the presented sonographic method we could prove that there are some small vessels in the deep fascia, but only at the SI 11 a relatively strong vessel penetrates into the musculature. Thus, it can be assumed that the muscular acupuncture point localizations are anatomically more clearly defined than some triggerpoints.

Example for the daily praxis: The so called “magnificent 4” are trigger points (and acupuncture points) used for the treatment of the lower cervical syndrome with the result of an immediate release of the muscular hypertension. These points which are situated under the medial border of the scapula (B43 – Kao-huang / B44 – Shen-táng) and in the region of the crossing M. trapezius – M. levator scapulae will be discussed as a typical local acupuncture/trigger point treatment which should be completed by treating the individual distant points.