# THE ALTERNATIVE PATHWAY OF LAMENESS-DIAGNOSIS AND TREATMENT BY RAC CONTROLLED EAR ACUPUNCTURE

# Uwe Petermann, DVM

# Summary

Ear acupuncture seems to be very different to the well known body acupuncture. When ear acupuncture was developed it first had only a scientific, western approach to disease. Body acupuncture had only traditional Chinese approach. In the meantime we have more than 30 years of experience with ear acupuncture in humans and 20 years of experience in animals. Nowadays both sides come together and are building a bridge between TCM and western medicine. In this lecture it is shown, how to work easily with ear acupuncture, to do a clear western lameness diagnosis and how to treat orthopedic diseases.

All the newest maps of orthopedic points; all joints (hip point, elbow point), points of all locations of the spinal column and the spinal cord, points off all tendons and muscles etc., are shown and their use in diagnostics and treatment.

# Introduction

Today we can use a very easy way of acupuncture thanks largely to the huge contribution made by Dr Nogier; who was the pioneer of ear acupuncture and RAC controlled acupuncture. This opened the door to a modern, scientific acupuncture.

Without discarding traditional Acupuncture, the attempt was made to locate the exact ear acupuncture points for every joint and vertebra, and later on for all organs. Further investigation by Prof Bahr, Dr. Strittmatter and the DAA (German Academy for Acupuncture) also located points for every nerve, ganglion, brain locations, as well as many different functional points associated with well known drugs, and at lastly every body acupuncture point on the ear. So we have in ear acupuncture points like ACTH point, Endorphin point, Histaminic point, Prostaglandin point, or organ points, e.g. liver point, kidney point, adrenal gland point, thalamic point, and so on. Amazingly, methods, modern ear acupuncture and ancient traditional acupuncture, lead us to the same therapy points.

The further we delve into both methods, the ear acupuncture that is closer to school medicine and body acupuncture that is developed by far eastern medicine, the more interesting it becomes. We see the many similarities and parallels which are so manifold and should be not be surprising since both methods describe the same conditions though by a different means.

Still today for me and for people with western education the more simple method for a diagnosis and therapy is the school medicine approach using ear acupuncture.

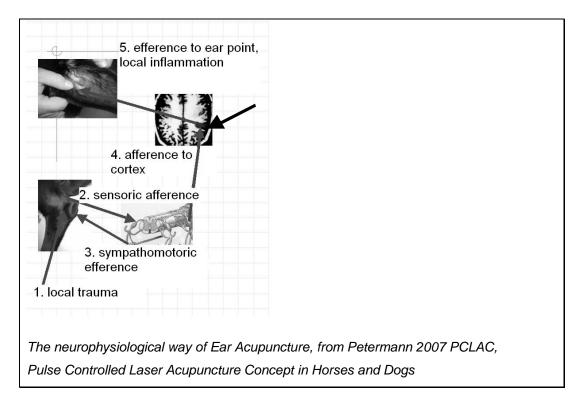
# What is the way ear acupuncture works?

Body acupuncture works in the scientific sense in a neurophysiologic way, via hormonal pathways, through mechanisms by bioactive substances, and at last the biocybernetic way. These same mechanisms we find again in ear acupuncture. But some things are different. An example how ear acupuncture works is demonstrated in a male black Labrador patient. It had an acute inflammation in the elbow with big swelling of the joint and intensive pain. When I searched the connected ear point for treatment, I saw also a clear pronounced swelling in the elbow point at the ear.

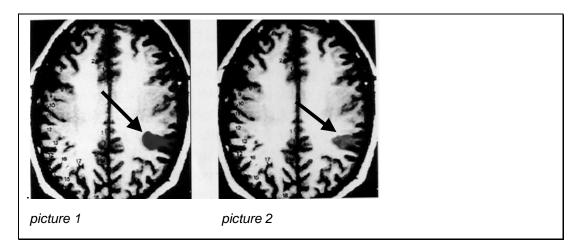


picture 1: acute inflammation, big swelling in the elbow joint, picture 2: pronounced swelling in the ear point of the elbow

The neurophysiologic explanation is as follows: when there is a trauma in the elbow (step 1) we have peripheral irritation and pain transmitted by sensory afferent nerves to the spinal cord and back by somatomotoric efferent nerves to the affected joint leading to local inflammation (swelling, pain, heat in the joint, step 2). But the sensory afferent irritation reaching the spinal cord not only answers the irritation by efferent reaction back to the local trauma (step 3), but also by an efferent central leading reaction, passing the thalamus and reaching the sensorial area in the brain cortex and the animal realizes pain (step 4) as we can see on the fMRI (arrow). From the cortex the irritation leads directly to the ear reflex zone and to local microinflammation (step 5). We find swelling, pain, increasing local temperature and reduced electric resistance of the point. The body has created, immediately after the acute trauma, an active ear acupuncture point.



This direct connection is shown in the investigation by Alimi, Geissman and Gardeur. They showed us by fMRI that in case of trauma of the thumb the same area in the cortex is active (*picture 1*) as when we irritate the thumb point of the ear (*picture 2*).



# Controlled Ear Acupuncture as a diagnostic tool

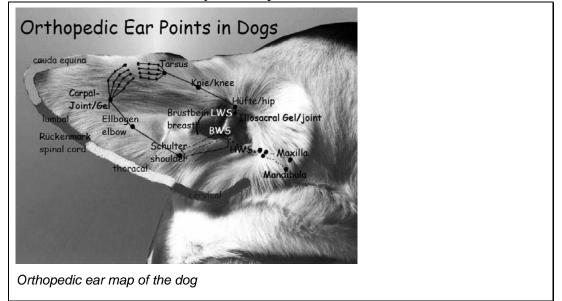
Orthopaedic diagnostics on animals is more difficult than on humans, for the veterinarian has no information about place, severity level of the pain and above all, he has no information as to which special movement causes the pain-reaction in which place of the body. The veterinarian merely can see on which foot the animal has the lameness. Further, he can try to provoke a pain or reaction, e.g., by stretching,

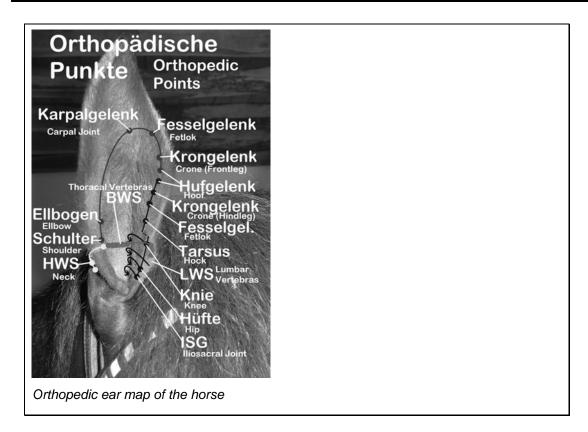
bending or palpating the leg. In this way, he can draw conclusions on the point of the lameness. Finally, the point of the lameness can be limited by radiographic diagnostics. But interpretation of radiographs often is very difficult and can lead to a wrong diagnosis. Through this, the place for the local therapy can be incorrectly chosen. Controlled Acupuncture could offer valuable diagnostic assistance, if an ear chart with accurate orthopaedic point localizations is available. So the ear-acupuncture-chart in veterinary medicine has not only therapeutic but also an important diagnostic meaning. Different authors created ear charts of some animal species over the past years. The points of ear were in most cases found using electrical point detecting devices with well-known orthopaedic pain localizations or by pain provocation tests. But there where only few points for orthopedic treatment and most of the points seemed to me not to be at the right position.

#### The procedure of lameness diagnostics by RAC-controlled ear acupuncture

First of course a thorough clinical examination is done. After that, one has to look for active earpoints; that show us which joint and vertebra is affected. This can be done in a couple of ways; using an electric point finder, or using a laser with various frequency settings according to Nogier combined with the RAC pulse diagnosis.

In body acupuncture we can find every body point by reduced electric skin resistance with help of an electric point-finder. Here we have no difference between "active" points, meaning acupuncture points that are not in balance, and "non-active" points, points that are not out of balance and so not must be treated. On the ear only "active" points have reduced electric skin resistance and so can be found by electric point finders.





The second way to find "active" points is very much easier. We can find the active points by RAC-control. Pulse feeling (RAC-Control) is nearly indispensable as an instrument for locating the pathologic points of the ear (and for me those on the body as well). The RAC (Reflex Auriculo Cardial or VAS Vasoton Autonom Signal) is based on a vegetative micro-stress reaction. With the help of RAC it is as if you can have a detailed look into the body; often much more specific as with picture giving procedures like radiographic or ultra sound pictures. Using the laser, if you have lameness in the right forelimb you irradiate the area of the ear that represents the forelimb with the laser frequency "C" and at a certain point you will get a clear RAC-rebound. You mark the point, compare it with the chart and realize that you have the point of the shoulder joint. So you not only have found out which joint is affected, you also have at the same time the main point for acupuncture treatment of the lameness. Next you look for the area of the vertebrae, also with laser frequency "C", and you find the connected blockade in the spinal column and in the same moment the masterpoint of its treatment.

# **Different options to get RAC rebounds**

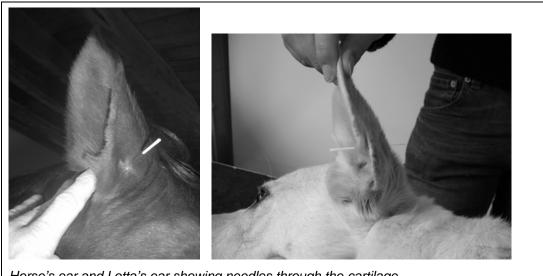
For getting RAC rebounds on active points at the ear (and on the body as well) we have a lot of options. The best results we get with lasers, especially when we have the right frequencies that are in resonance to the point, e.g., frequency "C" for orthopedic points. We also obtain very good results with electric fields. Here we use the so called 3 volt hammer. With its (+) pole we find the gold points, that means points in deficiency, and with the (-) pole we find the silver points, points that are in

excess. The body also reacts with RAC on Gold or Silver needles and an Ultracain® ampule (anaesthetic). Every active acupuncture point on the ear and on the body will react to these "RAC detectors".

The advantage of RAC is localisation of active acupuncture points quickly and effortlessly. RAC finds and distinguishes the most important points. RAC opens the way for diagnosis of lameness via the ear.

#### What tools do we need for ear acupuncture in horses and dogs?

For stimulation of active ear points we can use thin painless needles for body acupuncture, semi-permanent needles, injection of local anaesthetics and injections of homeopathic drugs. A very special kind of long term treatment is setting Goldbeads into ear acupuncture points. This is very simple and has the same effect as Gold bead acupuncture in body points. My personal favorite tool for ear acupuncture is the laser. With the laser we only need 20 sec of time for each point for stimulation.



Horse's ear and Lotta's ear showing needles through the cartilage

A needle is inserted in the hock point of a horse and in the elbow point of a dog. The needle is pricked through the ear cartilage. With special pain reduced needles this is possible without any reaction of the patient.

# Indications for ear-acupuncture in combination with local laser therapy and traditional acupuncture

One area of ear acupuncture is for any orthopaedic case. Ear acupuncture is very good and easy to use in back problems. Laser treatment is used most frequently for spinal problems. All forms of lameness, acute and even chronic in horses and dogs are also indicated. Very often, costly and unreliable operations can thereby be avoided. The active vertebra points and the joint point one finds by lameness diagnosis via the ear are the first points in treatment. In addition to these active points

most commonly used acupuncture points you can add on the ear to aid in the treatment are, if you find them as active points by RAC: Thalamus point (LI 4), Prostaglandin point (GB 41), Point against anger (LIV 3), Anabolic-point (SP 2), Plexus Coeliacus (SI 3), and the Pituitary Gland point, BL 62). After the ear acupuncture treatment with laser, semi-permanent needles or normal needles, we can add LLLT (Low Level Laser Therapy) on the affected joint and vertebras.

There is also the possibility to combine ear acupuncture with traditional acupuncture. I have developed ear maps with all the pathways of the meridians displayed on the dog's and horse's ear, thus, one can stimulate every body acupuncture point on the ear as well. In addition, one can use all traditional ideas and treatment concepts like Shu-Mu, Midday-Midnight, Mother- son, Tendino-Muscular Meridian concept, etc. One also can combine ear acupuncture with normal body acupuncture treating the body points instead of the correlated ear points with the same effect.

# References

- 1. Alimi D, Geissmann A, Gardeur D. (2002) Auricular Acupuncture Stimulation Measured on Functional Magnetic Resonance Imaging, Medical Acupuncture- A Journal for Pysican by Physicans Volume 13/Number 2
- 2. Ambronn, G., Petermann, U., Werner, L. Ohrakupunktur in der Veterinärmedizin Sonntag Verlag, Stuttgart 2001
- Artmeier P. und König H.E. (1978) Zur Ohrakupunktur bei Hund. Kleintierpraxis 23 /1978/299ff
- 4. Bahr, F. (1997) Scriptum Systematik und Praktikum der wissenschaftlichen Akupunktur für weit Fortgeschrittene und Experten. Eigenverlag, München
- 5. Krüger P. und Krüger H. (1980) Grundlagen der Aurikulotherapie bei Hund und Pferd. Der Akupunkturarzt/ Aurikulotherapeut 1/1980/13ff
- 6. Litscher, G. et al.: Die schmerzfreie Laser-"Nadel"-Akupunktur moduliert die Gehirnaktivität. Schmerz und Akupunktur 2004; 1:4-1
- 7. Nogier, P. F.M. (1981) Lehrbuch der Auriculotherapie Maisonneuve, Sainte Ruffine
- 8. Petermann U. (1989) Die Ohrlokalisationen der Gelenke beim Pferd. Akupunkturarzt/Aurikulotherapeut 7-8/1989/167
- 9. Petermann, U. (2002) Earacupuncture Map of the horse, Procc. of 28<sup>th</sup> IVAS 2001 world congress, Liuhe Hawaii, USA, 1-3
- 10. Petermann, U. (2007) PCLAC (Pulse Controlled Laser Acupuncture Concept), private publishing, www.akupunkturtierarzt.de

- 11. Still J. (1987) Auriculodiagnostic points in the dog: relationship to disorders of the nervous and locomotor system. *Am J Acupunct* 15: 261-268
- 12. Strittmatter, B. (2005) Taschenatlas Ohrakupunktur nach Nogier/Bahr 3. überarb. Aufl., Hippokrates Verlag, Stuttgart
- Zohmann, A. (1990) Physiologische und pathophysiologische Grundlagen von Ohr-, Körperakupuntur und Neuraltherapie. Prakt. Tierarzt >collegium veterinarium< 71, 83 - 84</li>