

# **Laser Acupuncture In Competition Horses**

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## ***Summary:***

A presentation of modern laser acupuncture treatment for horses. All relevant horse diseases are given for which treatment with laser acupuncture has been used, in part with case studies. A look into the scientific foundations of acupuncture and laser therapy is given.

**Key words:** laser, acupuncture, horse

***Acupuncture: The oldest form of therapy in the world, newer than ever.***

## ***First, there's great scepticism***

When acupuncture is mentioned, there seem to be two schools of thought. On one side of the fence are the acupuncture devotees, for whom acupuncture treatment is always their first choice, because they have already been convinced of the astonishing efficacy of acupuncture. On the other side are all those who may either have tried it without success or simply reject the idea of learning more about it because they view acupuncture as unscientific nonsense. Thus, for example, I was recently contacted by a patient's owner, who wrote that her horse, who had been previously treated several times for back problems and was finally given up as no longer suitable for riding, was now following acupuncture treatment easily clearing M-obstacles, something it had not been capable of even prior to the onset of back trouble. She, too, had been highly sceptical of acupuncture treatment, and found it difficult to believe that in general, back problems in horses respond well to acupuncture treatment. She wrote further that she had suggested acupuncture to several others whose horses were suffering from similar problems, but had not been able to overcome their scepticism. Such sceptism of things not encountered every day is clearly difficult to overcome, but when the patient is a horse, it is truly worthwhile.

## ***The use of acupuncture is now growing rapidly***

This article is sure to be of interest to both sceptics and the supporters. First, because I will demonstrate that acupuncture is in no way unscientific and second, because so few are aware what a multitude of diseases can be successfully treated by using acupuncture. In (human) medicine, acupuncture has become increasingly part of the medical scene over the past ten years. The German Society for Acupuncture and Auricular Medicine (Deutsche Gesellschaft für Akupunktur und Auriculomedizin) included well over one thousand physicians among its members in 1997. This makes clear that acupuncture can no longer be considered an outsider in the field of medicine, and the day is coming when that role will be played by the sceptic and no longer by acupuncture itself.

The primary reason for this development is that modern acupuncture as practiced today has been freed from any mystical ideas by intensive, scientific research, and that the essential principles of the way in which acupuncture works are now well understood. In addition, acupuncture does not stand still; rather, it is being continuously developed further in order to successfully treat even more cases which have been resistant to therapy.

## ***How does acupuncture work?***

It is now possible to easily explain the underlying principles of acupuncture; here, they will be presented in highly compressed and simplified form. The **structure of the acupuncture point** looks like this: the body fascia, made up of collagen-rich connective tissue (also described as corium) has numerous breakings, through which vascular nerve bundles enter the skin. These are deposited in electrolyte-rich, loosened-up connective tissue, which has a strong electronegative charge surplus. If I either insert a needle here or expose the area to laser rays, the result will be a point-short circuit and through that, excitation of the nerves and moving nerve impulses forward, first to the spinal cord. From there, **various control mechanisms** of the body are selectively addressed, e.g. organs and hormonal control centers as well. Thousands of years of experience in traditional acupuncture have given us the knowledge today of which nerve points in the skin can be used to stimulate which functions. In the same way, so-called bioactive substances, which include the endorphins (hormones which raise the pain threshold) are activated by means of hormonal control systems. As a rule, we can differentiate between the following, scientifically established effects of acupuncture:

? 1. neurophysiological effect = reflex effect which takes place in seconds

? 2. neurochemical effect = through stimulation of various neurotransmitters and endorphins from within minutes to several hours

? 3. cybernetic effect = when the vicious circle is finally broken after several treatments and the control mechanisms function once more

As ultimately all body functions, from coughing to the repair and healing of wounds, are controlled by such vegetative, nervous and hormonal regulation, it is helpful to understand that acupuncture can have such a regulatory effect in attacking so many types of disease.

## ***Progress through the use of laser technology***

The introduction of laser technology into acupuncture treatment has definitely brought great progress. With laser technology, the acupuncture point can not only be treated without inducing pain and even without touching the area, in addition, the healing effect of the laser light can be utilized. The substantial therapeutic effect of the laser light is based on its physical specialty, coherence; this means that there are synchronously oscillating light waves of equal length, which can penetrate the tissue through their convergence. These light-induced pulses can now be used directly for cell energy production in the cells' power stations, the mitochondria. The cells' synthetic power (such as in the healing of wounds or the formation of collagen fibers in case of tendon damage) can be given an enduring start. Although none of this information is new, or at least it can be looked up, there are and this applies in particular to veterinary medicine, veterinarians and equestrians many sceptics, who in their ignorance continue to view acupuncture as either a kind of "voodoo magic" or just plain nonsense. And yet, as I have just explained, the working mechanisms of this regulatory therapy, are based on facts taught at all universities. Furthermore, anyone who makes the effort to discover a bit more about this type of therapy will be convinced that definite and regular therapeutic success can be achieved with acupuncture. This holds particularly true for diseases which even with great effort in terms of the diagnosis and therapy -- can only be treated over a lengthy period,

with only partial or even without any success whatsoever if standard medical treatments are employed. In contrast, acupuncture involves regulatory therapy, and thus one can say that in principle, therapy is possible for combating any disease, as long as regulation is still possible. In other words, therapy can be used for diseases where irreparable damage has not yet occurred and where organic functions can be stimulated into running again. This is indeed possible with a far greater number of diseases than one might think. Therefore acupuncture is also successfully used for chronic disease, where permanent regulation failure can often lead to very serious problems. This especially includes allergic and rheumatic diseases.

### ***Numerous tests have verified the outstanding efficacy of acupuncture.***

By now, a multitude of tests with acupuncture and/or laser acupuncture have been conducted on horses. These include own investigations with over [500 patients with back complaints](#) (see Treatment of the thoracic part of the spinal column...Treatment of back complaints...), more than 100 patients with chronic obstructive bronchitis (see [Treatment of COPD...](#)), patients with infected arthritis and tendosynovitis (see [Treatment of infected tendinitis...](#)) as well as numerous publications on individual cases of lameness, dental purulence, and skin diseases. On a case by case basis, these may be of lesser significance, but viewed in their entirety they are a remarkable proof of acupuncture's effects, which at first truly seem at least somewhat unbelievable. Keeping this in mind, pictures have been included as photographic proof. [Picture thieb 1 + 2](#) shows a patient with an infected hock joint inflammation (following a chip operation) after six months of treatment in various clinics. The horse was unable to stand on its foot. [Picture thieb3+4](#) shows the patient fourteen days later, following six treatments with laser acupuncture. The horse is now able to walk and even trot to some extent. [Picture 1](#) shows a patient six weeks after an operation on the palmar annular ligament of the fetlock with an infection in the digital synovial sheath of the fetlock and a purulent wound in the area operated on which is growing larger. The clinic saw no other possibility but to recommend euthanasia for the previously valuable horse. [Picture 3](#) shows the same horse ten days later (after ten laser acupuncture treatments); the wound has closed up. Incidentally, purulence ceased after just two treatments with laser acupuncture. ([Picture 2](#))

### ***Which diseases can be treated successfully with laser acupuncture?***

Now we come to the diseases in their specifics: the diseases which are most commonly treated in horses are concentrated in the entire area of the back. With just a few exceptions, acupuncture has been used to give fundamental and long-lasting freedom from pain to over 500 horses with back problems. Following the first treatment, a spontaneous, definite improvement in movement coordination could be seen, even in horses suffering from an ataxia. Complete healing where the horse could train again was achieved with approximately one half of these patients. Treatment of acute lameness caused by sprains, contusions and strains appears quite promising. In addition, nearly all the cases of infected arthritis and tendosynovitis could be completely healed. A significant improvement was also seen for chronic lameness such as tarsal osteoarthropathy, podotrochlea, and arthroses; here, too, it can be anticipated that the patient will regain its previous usefulness. Acupuncture treatment is also very helpful in cases of chronic obstructive bronchitis.(the extreme form is called given the name "Dämpfigkeit" in German, referring to the shortness of breath). Significant improvement in breathing is often noticed during the first treatment. The severity of the disease plays no role in the prognosis of

therapeutic success. It often happens that patients with acute breathing problems react in a most spectacular fashion, whereas less severe cases show no improvement or just the reverse. Much depends on how precisely the focus of the allergy can be determined and halted. Here, just as with conventional therapy, it is of course extremely useful to change the affected horse's posture. Acupuncture can also be employed to great benefit in treating the various forms of colic. Both strong cramps and total intestinal overextension can result from the build-up of gas, fluids or accumulated intestinal contents. Here, too, acupuncture proves how useful it can be to shift the irritant back into the right direction; the expanded intestinal sections are tonicized, the cramped areas are sedated. Thus a physiological function is quickly put back into action. In general, the effect is spontaneous; at most, within ten minutes. Acupuncture treatment is also successful in the area of gynecology. The most common problems requiring therapy are ovarian disorders as well as postpartum behavioral problems. A further possibility for acupuncture is for roaring. This involves a functional nerve disorder which controls the function of the larynx. In particular with young horses, where the disorder has not existed for long and where a residual function of the larynx can be recognized, the outlook for success is excellent. In these cases, acupuncture treatment is far preferable to an operation, as a physiological function of the larynx is ensured once more. As a rule, dental cysts and maxillary sinus purulence can also be successfully treated with laser acupuncture. In the majority of cases, this can also spare horses the stressful and usually long-term healing process involved in tooth extraction. In this connection, it is also worth mentioning that laser acupuncture also possesses a very strong inflammation-suppressing and demarcating effect and can of course also be used to great effect in the maturation and healing of abscesses. (See [Picture jaz1](#), [jaz2](#), [jaz3](#)). Laser acupuncture can also be used for [healing the eye](#) in certain cases of corneal abscesses and corneal edemas which resist therapy. Of additional interest is the possibility of using acupuncture to optimize performance and stamina in the patient. This is usually achieved by concentrating on specific points to eliminate slight functional disorders in individual organs, which can add up and prevent an optimum overall function. As various systems feeding back into one another are involved, individual body systems cannot be overburdened with an accompanying breakdown, as happens with doping. Just the opposite: overall health is enhanced. There have been many positive results from treating all of these illnesses with acupuncture. One must also keep in mind that the patient brought in for acupuncture has in many cases already been through a long period of "normal" treatment, and without success. In these cases, one could say that acupuncture was a kind of "last attempt," and very often brought the long-hoped for success. There are certainly many other areas where acupuncture treatment methods could be used, but these must be decided from case to case.

### ***Acupuncture is meeting with growing interest from veterinarians***

It must be stressed one more time that acupuncture is neither a miracle treatment nor a panacea. Nonetheless, it is a highly effective healing method which can be applied in many areas, with the additional advantage of having no side effects. The chief problem currently faced in using acupuncture to treat horses is the fact that there are still relatively few veterinarians not only highly trained in diagnostic skills but equally highly trained in acupuncture. For only when both are combined can unusual success be attained. Fortunately, interest in acupuncture is increasing tremendously, and I don't believe it is too much to imagine that in ten years the majority of both veterinarians and physicians will be offering highly competent acupuncture.