

Laser Acupuncture in Infectious Diseases and Wound Infections Including  
MRSA Infections

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SUMMARY

Pulse Controlled Laser Acupuncture (PCLAC) is the combination of two very effective treatments each for its own, acupuncture and Low Level Laser Therapy (LLLT). Laser Acupuncture will be described as an alternative treatment of all kinds of diseases arising from infectious germs. These are infectious diseases of organs like tonsillitis, acute bronchitis, pneumonia, kidneys, bladder and intestinal infections. Also any tissue infection deriving from injuries or post-operation including phlegmons (cellulitis infections), as well as joint and tendon sheath infections can be positively influenced or healed by laser acupuncture treatment. If there is enough experience in laser acupuncture with patients like these, all these diseases can be treated without antibiotics. This is from a very special interest in cases of MRSA infections, when antibiotic treatment has no effects.

INTRODUCTION

*Acupuncture.* Acupuncture can be carried out in many different ways to reach the aim of stimulating the immune system and strengthen the infected organ, tissue or joint. Just to mention some of these many points that come into consideration, LI 4, SP 6, ST 36, GV 14, LU 11, etc. The election of these points is dependent upon many specific factors of the inflammation. But there are two specific most important acupuncture points that we can use in general, that means in any kind of infection not depending on specific factors, and which I treat in any case of infection. These are two Luo points combined by TCM Midday- Midnight- rule, TH 5 and SP 4. The Midday- Midnight rule is one of my favourite acupuncture rules because it balances in every case a Yin and a Yang meridian, one on the hand, one on the foot and it balances the circadian energy because both have an interim of 12h in their circadian rhythm. These two Luo points are TH 5, which is the Thymus point of Ear Acupuncture\* and SP 4, which is the Interferon point of Ear Acupuncture\*. I call them “*Switch on points for the immune system*”. In case of organ infections one combines them with the specific organ point; e.g. the organ point of the lung at the ear or the identical body point LU 7, the tonsil point (or LU 11), the kidney point (or

KID 7), the uterus point (or SP 5) etc. In infected wounds, joints, abscesses, phlegmons, etc., one combines the two “Switch on points” with the concerning Tendino-Muscular Meridian (TMM). The TMMs are opened by their Ting point, their Tonification point and a specific Reunion point, which depends on if we treat a Yin or Yang meridian and if it is situated on the fore- or hindlimb. We have four Reunion points for the TMMs: GB 13 for the Yang meridians of the forelimb, GB 22 for the Yin meridians of the forelimb, SI 18 for the Yang meridians of the hindlimb and CV 3 for the Yin meridians of the hindlimb. So one can see, it is a very simple but nevertheless extremely effective concept.

*LLLT (Low Level Laser Therapy)*. LLLT (low level laser therapy) of the infected tissue is added as a very effective anti-inflammatory therapy. For this LLLT I use a 90 watt impulse lasers with 904 nm wavelength, because only these lasers can penetrate deep into tissue that enough laser energy reaches the infected cells. The main principle of the anti-infectious force of LLLT is the clearance of peroxide radicals in the infected tissue (KARU, T); another one is activation of different kinds of immune cells like lymphocytes and macrophages and mediators like lysosomal enzymes. Laser light also leads to demarcation of infected and traumatized tissue. That means laser light separates the infected cells which are on the border to cell death and stimulates their phagocytosis. The cells that have a chance to survive are strengthened by laser energy.

There are two specific impulse frequencies that are in resonance with infected tissue and of much better value than any other frequency. It is Fr. A' and A'' according to Nogier (A' = 292 Hz and A'' = 37376 Hz). Because in impulse lasers every beat is one energy impulse the frequency A'' has more than 150 times more energy /sec than A'. In the moment there is only one laser worldwide that is able to provide us with this high energy frequency (Physiolaser, 90 watt impulse laser, Reimers & Janssen, Berlin). The kind of treatment and the results are explained on several case studies.

*1. Infectious arthritis and tendonitis*. Infectious arthritis and tendonitis is positively affected by LLLT that offers a good chance of healing. In these cases it is essential to find the focus of the infection and include it to the treatment plan. Especially with infections after minimal invasive surgery we find the invasive channels as the focus and have to treat them very carefully by LLLT. We also treat the whole infected joint or tendon sheet with LLLT (frequency A'/A'') with the laser for about 2 minutes (fr. A'') or about 20 minutes (fr. A') and with special attention we

have to treat the surgery channels where we found a focus of infection. Again we treat the TMM (with Fr. A' 30sec or A'' 5sec or by dry needles) and TH 5, SP 4 (Fr. 5, 20sec, or dry needles) against inflammation. For acupuncture we treat.

2. *Wound infection.* Laser treatment is highly recommended for infected wounds, fistulas, disturbed wound demarcation and deep wounds. Again we treat the TMM and the immune stimulating points. For local wound treatment we add LLLT with Fr. A'/A''. Especially in horses we see the development of hyper- granulation tissue in wounds at the lower part of the limbs. Besides the foregoing described above, treatment with "Wound Water" is also recommended. The "Wound Water" contents copper vitriol, healing earth and homeopathic dilution of Arnica, Echinacea and Hamamelis (recipe can be ordered). A very special indication for Laser Acupuncture is treatment of MRSA and Pseudomonas infections where antibiotic treatment has no effects. The treatment follows the same principles as described above (see case studies).

#### CASE REPORT 1

Figure 1 shows a neglected wound with a swelling nearly as big as a handball over the fetlock of a foal. The foal had been outside in the pasture night and day. After the wound in the foal was discovered by the owner it received standard treatment including bandages and antibiotics for about 2 weeks before it came in that state for laser acupuncture. The following therapy included daily LLLT with 6 x 90Watt impulse laser shower for 15 minutes. Additionally laser acupuncture (LA) of SP 2 (wound healing), TH 5, SP 4 (immune stimulation) was carried out. No other treatment such as antibiotics, etc. had been applied. Figure 2 shows the situation 3 weeks after beginning Laser Acupuncture: the wound is contracted and shows good epithelialization and sound granulation tissue. The swelling is reduced by half. In Figure 3 the healing was finished after 4 months of treatment. Over that time the foal was treated nearly every day, most of the time by its owner. I saw the foal every 2 weeks.



Figure 1 healing process of a neglected wound in a foal



Figure 2



Figure 3

## CASE REPORT 2

The case of an MRSA infection in a dog shows the excellent anti-infective effect of Laser Acupuncture even in such cases, in which antibiotics have no effect. You can go as far as to say that Laser Acupuncture is currently the only successful treatment possibility.

A three-year-old German shepherd mix was presented for Laser Acupuncture. The dog had been treated twice weekly at a small animal hospital for four months. During this time the treatment was completely unsuccessful and treatment had been stopped. Euthanasia of the dog was recommended to the owner, because there was finally no way to help. But the owner asked me whether Laser Acupuncture would be able to cure MRSA infection. I answered truthfully that I didn't treat MRSA infections before, but many other antibiotics resistant infections have successfully been treated.

The infection had started 4 month previously when the dog was presented to the veterinary hospital because of a small wound unclear in origin. The wound was cleaned and treated with antibiotics. Despite the therapy, the wound swelling increased rapidly, showed suppurative fistulation and pain. A tissue sample from the infected area was taken for investigation; an MRSA infection was verified by culture and sensitivity.

The clinic tried a further therapy with selected combinations of antibiotics that were changed several times. But this also showed no improvement. Swelling, fistulation and pain became worse. As a last resort a wide-scale excision of the diseased tissue was considered which was carried out very carefully. But the wound after a few days, showed a dehiscence with massive infection. The clinic advised the euthanization of the dog, as the infection and pain became too strong and was no longer manageable. There was no chance of healing any more.

At this stage the dog came to me. The wound showed a highly destructive infiltrative infection. The granulation tissue was tubercular and incredibly secretive (Figure 4). At the beginning of the Laser Acupuncture medical therapy (antibiotics and anti-inflammatory drugs) was spontaneously discontinued.

In addition to LLLT of the wound with the frequency A' for 10 minutes the immune stimulating points TH 5 (Thymus point) and SP 4 (Interferon inducing point) were treated. Already during the first session the wound showed a typical spontaneous superficial secretion and a spontaneous reduction in pain could be observed. After 10 days (5 treatments) a signifi-

cant contraction with beautiful epithelisation and clean granulation tissue was seen (Figure 6). One month after the start of Laser Acupuncture the wound had healed without a visible scar (Figure 5).

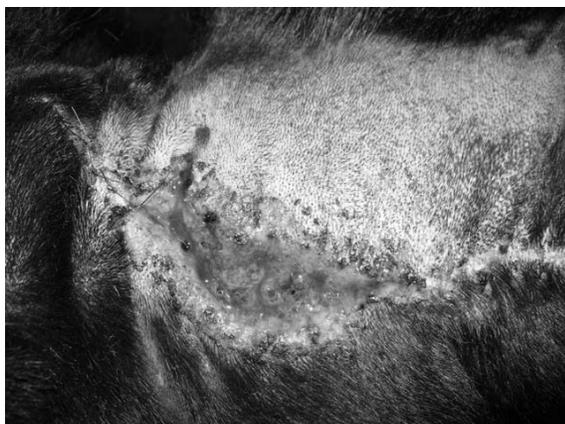


Figure 4 MRSA infection in a dog before and after Laser Acupuncture treatment



Figure 5

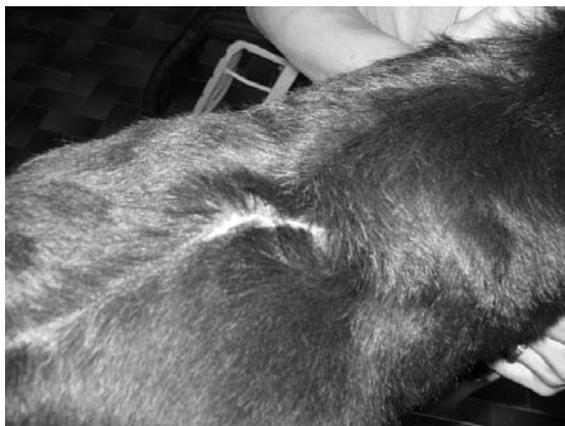


Figure 6

3. *Disturbing foci*. In other cases we see very often that the wound only seems to heal on the skin surface and is closed but doesn't heal properly inside. Wound demarcation stopped inside the wound and there are small granulomas formed under or in the scar. These granulomas can work as the typical disturbing foci or perturbative fields which we see regularly as causal trigger factors in chronic allergic and chronic degenerative disease. In cases of badly healed, old scars, laser treatment provokes exacerbation of the granulomatous tissue and exudation of necrotic tissue (that had been stored inside the granuloma). So the healing of the primary wound, especially the non-demarcated tissue starts again and a final healing will be achieved. The following acupuncture points should be stimulated: LIV 3, SP 2 and to improve demarcation TH 5 and KID 3. In cases of wound infection we add SP 4. What can happen from these granulomas and the way to treat this, I will describe in a case report.

#### CASE REPORT 3

A femur fracture in a dog was fixed by a metal plate. After healing of the fracture, the limb of this dog was completely paralysed. There were no reflexes and no sensitivity in the whole leg, including loss of conscious proprioception and deep pain. Hoping to help the dog, the plate was removed by a second surgery, but the limb didn't improve within the next year. Now the dog came for acupuncture treatment. There were still no reflexes and no sensitivity. The musculature was completely atrophied in the leg. It was only skin and bone. The operation wound looked nasty but was closed completely. Beneath and beside the scar one could only feel the femur bone. In the scar I found a severe disturbing focus (by RAC reaction to the laser frequency A'). After two treatments with two days interim as described above the wound that had been closed for one year opened and started demarcation.



Figure. 7 Fistulation starts after first Laser acupuncture treatment. See the tip of the big arrow, the small arrows show the size of the nasty scar.

During the next two days the scar became more and more swollen and showed fluctuation. A big abscess developed and after a further two days 150 ml of pus came out when the abscess opened. Now I started to treat the neurological problem, treating the Shu points from Kidney to Large Intestine, that all showed strong RAC reaction with frequency C and the Governor Vessel between the spines with frequency E, according to the spinal cord in the same area. Also a strong reaction was shown on frequency E medial along the femur bone. I believe it was a part of the sciatic nerve. Additionally the point KI 4, the influential point of nerve tissue, was treated with Fr. E. This treatment was carried out for one further month daily by the owner with a rented impulse laser 90 Watt. When the patient came for the next visit after this time, the dog was able to stand on the leg and to move a little bit. All reflexes could be generated and the skin sensitivity was back again. The treatment was stopped. At the next visit in my practice 2 months

later the dog walked and ran perfectly and the muscles had developed again. The dog was completely restored. This example shows us that disturbing foci can provoke severe problems like complete paralysis and treatment of the disturbing focus opens the door to healing.

4. *Abscesses and phlegmonia (cellulites)* Laser treatment is also exceptionally useful in local inflammations. In very many cases phlegmonic processes, e.g. after the infection of wounds, in mastitis and even in acute to sub-acute thrombophlebitis can be cured when previous treatment with antibiotics have proved ineffective. Much easier, fresh infections can be treated before antibiotics have been applied. Laser irradiation also has an outstanding effect on the maturation and demarcation of abscesses (see case study above). This also applies, for example, to hoof ulcers or infected inflammations of the hoof dermis which do not mature and diffusely spread into the rest of the hoof dermis and which are normally very difficult to manage.

5. *Infections of the navel and fistulas of the urachus.* Navel infections often cause navel hernias in dogs and foals. Especially in foals we also see infections starting from the navel and leading to severe general joint infections. In foals we also see sometimes that the urachus doesn't close after the umbilicus cord is ruptured and urine is dripping out of the umbilicus. With laser acupuncture we can do the best prophylaxis I can imagine for all these problems. We treat the navel with frequency A' for 30 sec each and TH 5 and SP 4 (with their special meridian frequency according to Reininger or needle acupuncture). In cases when infection has already taken place we must treat the navel much longer (3-5 minutes with Frequency A' or 20 sec with fr. A''). In urachal fistulas in foals we find a strong RAC reaction in the area of CV 9 that we also treat with frequency A'/A''. Acupuncture points are TH 5, SP 4 and KI 3. With this treatment we also can avoid disturbing foci in the navel.

6. *Acute infections of organs.* Even acute organ infections can be treated by laser acupuncture using the same basic points with additional LLLT. Beside the *Immune Wake up Points* we only have to treat the organ point at the ear or their corresponding body point\*. These are: KI 7 for the kidneys, Lu 7 for the lung etc. (see the corresponding body points in figure 8). This is accompanied by LLLT of the organ with fr. A'/A''. The LLLT of course is more effective in superficial and smaller organs than the bigger organs which are covered deeper in the body. So LLLT is considered more when infection starts with tonsillitis, sinusitis, pharyngitis, laryngitis,

mastitis or bladder infection. Here we can stop infection in the state of a *Biao* illness before it goes deeper in the body and develops a *Li* illness like pneumonia, intestine or kidney infection.

\*Ear acupuncture aroused from western thinking. So we knew the point of the organ “Thymus” at the ear and the “Interferon inducing point” at the ear for now more than 40 years. About 15 years ago we started to transpose the body points to the ear as well. There we found TH 5 at the same place at the ear as the former known “Thymus point”, SP 4 at the same place as the “Interferon point” and many other important body points in the place of organ, glandular and hormonal points that had been known on the ear before. This was the moment, when ear- and body acupuncture as well as eastern thinking and western thinking came together in harmony.

But even when this has already happened, we can use the concept successfully. I personally see the best results when I don't use any drugs additionally to laser acupuncture. So I treat these diseases without antibiotics in every case. But one must prove conscientiously in every special situation what is the best for the patient.

**Some Ear Points and their identical corresponding Body Points**

<b>Ear Point</b>	<b>Body Point</b>
Lung Point	LU 7
Tonsils/Larynx Point	LU 11
Kidney Point	KID 7
Liver Point	LIV 8
Pancreas Point	SP 2 (right side)
Spleen Point	SP 2 (left side)
Ovary Point	SP 5
Uterus Point	SP 6

Figure 8 Ear Points and Identical Body Points

**CONCLUSION**

These examples and hundreds of successfully treated patients with infectious diseases show that Laser Acupuncture should be considered as a very efficient anti-infective therapy. This is even true for patients that did not respond to antibiotic or other anti-inflammatory therapies.

Reference

1. Karu, T.I. "Photobiological Fundamentals of Low-Power Laser Therapy." IEEE Journal of Quantum Electronics 1987; QE-23:1703-1717.