Clinical study of Laserneedle acupuncture

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Summary

We are reporting on over 500 acupuncture cases, treating a wide range of illnesses ranging from orthopedic, internal, neurological and psychological diseases, all of which were treated with a newly developed and now available Laserneedle system.

Therapy was highly successful using both body acupuncture and acupuncture of the ear in illnesses ranging from cervical, thoracic and lumbar syndromes, gonarthritis coxarthritis, rhizarthritis, periarthritis of the shoulder, epicondylitis humer radialis, tendonitis, fibromyalgia and polyarthritis, Morbus Bechterew, paresis after strokes, migraine and other headache-syndromes, Tinnitus, trigeminal neuralgia, gastropathy, bronchial asthma, AVD, depression and other psycho-vegetative burn-out syndromes.

Treatment was made by simultaneously using 8 Laserneedles, which were not pricked into, but adhered to the skin. The Laserneedles emit red and infrared laser rays with a high-energy output, so that perceptible, vegetative stimulation can be detected at the sites of the acupunctured areas.

We found out that especially in the therapy resistant, long standing cases and those with chronic back- and spinal problems considerable improvements in easing pain and increasing mobility could be made. Recognizable success was made by using Laserneedles in cases suffering from psychological illnesses, especially psychosomatic related Burnout-Syndrome and cases of exhaustion. Usually after 2-3 treatments sufficient success was made, without any side effects.

1. Introduction

For the first time Laserneedles using a high optical energy output and needle equivalent were united with multiple points thereby allowing for painless 8-point simultaneous treatment in accordance with traditional Chinese acupuncture. The Laserneedles themselves were developed by the German Physician Dr. Detlef Schikora and was first introduced at the MEDICA fair in 2000. The basis of laserneedle therapy involves combining the positive biological stimulation of tissues through Laser rays, such as analgesia, muscle relaxation, promotion of microcirculation an the stimulation of the immune system, with the traditional working methods of classic acupuncture. That means the simultaneous needling of the individual with alignment in an 8 point combination. During the period of study 73 patients with various illnesses, were treated. The prerequisite required for involvement was that all other forms of conventional treatment had been tried out, including medications, physiotherapy etc. without bringing satisfaction or cure to the patient. To assess the success-rate two scales ranging from 0-100 were used. The patient firstly noted their level of contentment and secondly their individual pain-level.

2. Material, Methods and Patients

Research was completed from January to May 2001 in a general practitioner's Surgery, with the physician certified in both body- and ear acupuncture. The ages females, 30% male. For body acupuncture 8 exactly positioned Laserneedles were used. It is generally accepted that triggering a distinct acupuncture specific De-Qi sensation is an of patients treated ranged from 21 up to 91 years of age.

The majority of the patients treated had chronic- or a strong tendency to chronic illnesses, partly with acute or subacute symptoms. Around 70% of the patients simultaneously. The optimum treatment duration was 15 minutes. For ear- and skull-acupuncture the Laserneedles were exactly positioned by using a special headgear for fixation. The optimum treatment duration in these cases was 5 minutes. The acupuncture location points were found by using the usual methods, such as RAC-feeler and location with a 3 Volt-Hammer from Bahr, or even by simple pressure on pain sensitive areas. Corresponding points on the ear were also found by using the RAC-method or with a Pointselect apparatus were absolute must for an effective acupuncture therapy (2, 3 4).

It was shown that the Laserneedles invoked the characteristically pleasant De-Qi sensation in 4500 treatments (over 90% of all cases treated) which were described as a gentle tingling and flowing of warmth into the extremities. After treatment patients felt pleasantly relaxed and slightly tired. In comparison to the use of classic metal needles, which we have been using, for acupuncture in our surgery for the past 10 years, the frequency of reached De-Qi events was significantly higher. The De-Qi feeling was achieved in all patients regardless of their illness, it was more intensive in acute cases than what it was in chronic cases. Often the De-Qi feeling grew stronger in the course of treatment, indicating an increased sensitivity towards Laserneedle therapy. It is interesting to note, that the De-Qi events were often reached in each patient according to a defined time schedule, for example after 10 minutes in body and 1 minute in ear acupuncture. In all cases treated no side effects were registered. The normal complications in conjunction with traditional metal needle acupuncture such as needle collapse, bleeding, haematomas, pain, infections etc. can be completely ruled out by Laserneedle therapy. In particular the following illnesses from various fields of medicine were treated:

Orthopedics	Neurology/Psych.	Internal Medicine
spinal syndromes	paresis after stroke	gastropathy
intervertebral prolapsed disk	migraine / headache syndromes	AVD
gonarthritis	trigeminal nerve neuralgia	bronchial asthma
coxarthritis	Tinnitus	
rhizarthritis	depression	
periarthritis of the shoulder	psycho vegetative exhaustion	
epicondylitis humeri radialis		
tendonitis		
fibromyalgia syndrome		
polyarthritis		
Morbus Bechterew		

Results and Discussion

3.1. <u>Lumbar and thoracic spine syndromes as well as post cervical and lumbar intervertebral disk prolapse</u>

We treated local pain trigger points as well as the corresponding near points (ie. Bladder 10, 11 and 13 for cervical spine syndrome, or 50, 51 and 52 for lumbar spine syndrome) and the far points such as bladder 60 and 62, additionally the over regional pain trigger points such as duodenum 3, colon 4, 3 and gallbladder 41. In the case of superimposed psychic symptoms we also used the compensating points such as St36 and Ki6 and with stress symptoms often liver 3.

The difference to metal needle acupuncture is that the pain relief immediately sets in after the first treatment and could be increased in each following session by way of the booster effect. Therefore pain-syndromes could be completely relieved after about 5 sessions. Through simultaneous treatment of muscle-relaxing and calming down points it was evident that a quick sedative, fright- and stress relieving reaction in patients was achieved. In a usual series of 10 treatment sessions, the results must be described as exceptionally good. A large number of patients were completely free of pain or their pain was reduced to such an extent that their earlier quality of life was once again reached. It was noted, that significant improvements were made in all therapy resistant and therapied patients especially those with chronic spinal problems. Older people achieved a higher mobility of their affected joints and enjoyed far less pain. Apparently the simultaneous effect of laser rays used in combination with the rules of classic acupuncture were responsible for these successes. Analgesic and antirheumatic medication, such as ibuprofen, diclofenac or tramadol and even morphine painkillers could in most cases, either be greatly reduces or completely stopped.

Case example:

A 58-year-old female patient suffered a severe prolapse of the L5/S1 disks in December 2000 and was treated in hospital for 4 weeks. She was discharged with therapy resistant acute pain, even after CT guided local injections were given and being placed on a maximum of pain medication. Further ambulatory treatment was ineffectual. She was treated with Laserneedles using the following point combination: bladder 34, 36, 37, 40, 60 and 62 as well as stomach 36 and GV 2. After a few minutes in each session an intensive De-Qi sensation was built up, which presented itself as a pleasant, warm tingling feeling flowing into the whole leg. After the 15-minute treatment period, pain had been significantly reduced and an improvement of leg mobility was possible. After 3 more sessions it was possible for the patient to go to parties and dance again. After 10 more sessions only 10% of the initial complaint remained so that she went on holiday. Throughout treatment all pain relieving medication was gradually reduced and at the end of the therapy stopped. After 4 months this magnificent result was still unchanged. The individual pain score after end of treatment was 20%; the patient's subjective satisfaction was 95%.

3.2. <u>Gonarthritis, Coxarthritis, Rhizarthritis, periarthritis in the shoulder, Epicondylitis Tendonitis, Morbus Bechterew and Fibromyalgia-Syndrome</u>

Significant results were achieved after only 3-5 treatment sessions for the above mentioned disorders. Noticeable was the very high succe3ss rate for chronic epicondylitis during the initial phase of treatment. This illness is wide spread in the general population and difficult to treat. After only a few sessions using the local pain trigger points and further typical points such as TH5, colon 4, 11 and 12 and often the additional treatment of neck rigidity with TH15 and the cervical vertebrate points such as bladder 10, the patients were able to go about their normal activities as well as take part in sports and other hobbies. Even the chronic and impairing rhizarthritis, which is intermittently treated with crystal-steroids, responded very well to Laser needling. We frequently included the corresponding local regional, local and far trigger points (amongst others Li1, 4, 5, lungs 9 and 10 as well as C7). These type of disorders were also treated by the so called TMM system (Tendomuscular meridians), by additional needling of the ting- and tonus-points and the equivalent reunion zones, proved to be very useful thus providing further evidence of the benefits of Laser needling. It was also interesting to note the fact that severe disorders like Morbus Bechterew and fibromyalgia, as well as chronic polyarthritis responded exceptionally well to treatment with Laserneedles. In cases with years of impairment, great importance was attached to the additional treatment of relaxing. sedating, stress relieving and energy stabilizing trigger points such as stomach 36, kidney 6, CV17, bladder 60 and 62, TH5, gallbladder 41, lungs 7, liver 3 or GV20, to compensate for the psychological and depression symptoms. It proved to be more effective to treat multiple points than to stimulate only single local pain points, which is difficult as in the case of fibromyalgia syndrome, where pain occurs in the whole body and constantly changes its location. The psychological background, especially in fibromyalgia as well as polyarthritis is widely acknowledged and proven, so that we have a starting point for a stabilizing treatment. In periarthritis of the shoulder, which also is a long and impairing illness, the success rate of treatment was significant and of long duration.

Case example:

A 54-year-old patient with a 20-year history of ankylosing spondylitis and a partially stiff lumbar spine was treated with the following acupoint combination: Bladder 31, 32 and 62, Governing vessel 2, Kidney 6 and stomach 36, Spleen 6 and small intestine 3. During treatment, an intensive and reproducible De-Qi occurred in the lumbar spine and in both legs. Immediately after the first and every subsequent treatment, the patient was able, for the first time in years, to tie his own shoes, and the finger-to-floor distance had improved by approximately 20 cm. The intensive pain previously reported had disappeared spontaneously. They reappeared the next day, albeit less intensively. The patient's psychological condition improved as treatment proceeded. During the three-month follow-up period, the patient was free of pain and was capable of moderate physical exertion. The patient's individual pain score at the end of the treatment was 10 per cent; subjective satisfaction was 100 per cent.

Remaining paresis after stroke

Three patients who had suffered strokes with remaining paresis were treated in the regions of the affected extremities. A blood-flow increasing and muscle relaxing point combination was used with energy stabilizing points. In all 3 cases a significant increase in mobility was achieved by reducing spasticity and improving the fine motor ability.

Case example:

A 78-year-old patient with a painful residual paresis of the left arm was treated with the following combination: Colon 4 and 11, Small intestine 3, pericardium 6, Heater 5 and 15, Governing vessel 20, stomach 36.

After five treatment sessions, the elevation of the arm was increased from 90 to 120 degrees, so that the patient was able, for the first time in five years, to put on her sweater unassisted. Pain and precision motoricity were also improved markedly. Subjective patient satisfaction was 90 per cent.

3.4. Cephalgia, Migraine and Trigeminal neuralgia

The necessary condition prior to treating chronic headaches is an intensive neurological and radiological examination of the patient. With these indications we used local- and far trigger points. Migraine attacks could be rapidly reduced and after due course of treatment be stopped completely. Tension headaches could be treated quickly. Three patients suffering from Tinnitus were treated. The results here were not as impressive as in other disorders; often the tone/noise could be reduced and sometimes for a short interval stopped completely. Further long-term studies are being evaluated in the future. Long-standing trigeminal nerve neuralgias were successfully treated after only 5 sessions and have to date not reoccurred. Employing Laserneedles to the head proved to be absolutely free of difficulty, considering their location and application required.

Case example:

A 53-year-old patient with a 20-year history of trigeminal neuralgia in the right mandibular branch, on carbamazepine 400 mg, was treated with the following acupoint combination: Colon 4, small intestine 3, Stomach 4, 5, 6, 36, and 44, Conceptor vessel 24.

After the first treatment session, a marked improvement was already noted in the particularly painful area around the corner of the mouth. After three additional treatment sessions, the pain had disappeared, and the medication could be gradually discontinued. During the two-month follow-up period, the patient was free of pain for the first time in decades.

Arterial obstruction disease

Case example:

In a patient with a ten-year history of iliac arterial occlusion and bypasses, where surgical intervention was contraindicated, the walking distance was improved from 100 to 2000 meters after five treatment sessions. The following combination of acupoints was used: Bladder 40, 58, and 60, Stomach 36 and 41, Liver 4, kidney 6, Spleen 6.

Treatment obviously resulted in marked improvement in microcirculation, with an additional muscle relaxant effect. Subjective patient satisfaction was 95 per cent.

3.6. Gastropathy and bronchial asthma

In most cases we are dealing with psycho vegetative and other disorders, so a combination of organ related trigger points with sedating and stress relieving effects were of importance. In both diseases the patients' health greatly improved after the first session.

Case example:

A patient with a history of many years of irritable bowel syndrome was treated with the following combination: Pericardium 6, spleen 4, Small intestine 3, liver 3, Stomach 36, Yin-Tang, Conceptor vessel 12, bladder 21.

Nausea and constipation, nervous unrest, and dizziness disappeared after a few treatment sessions. Subjective patient satisfaction was 100 per cent; symptom reduction was 95 per cent.

3.7. Depression, anxiety, panic attacks, psycho vegetative exhaustion

Spectacular results were achieved with Laserneedles in the treatment of psychic and psychosomatic illnesses. In the general practitioners surgery experience shows that a large proportion of somatic related disorders are linked to depression. In these cases treatment is extremely difficult and often leads to the prescription of addicting medication, or even psychotropic drugs. Especially younger patients frequently refuse these drugs. Extremely well treatable and often quick results were disorders such as burnout and exhaustion syndromes, in conjunction with anxiety and panic attacks and depressive tendencies. Generally the psychotropic drugs could be stopped after only a few sessions, as with pain relieving drugs in orthopaedic disorders. Patients who had been treated with sedating and anti depressive points were able to sleep better after only a few sessions. Their family life improved greatly. Laserneedle acupuncture considerably reduced illness related absence from work.

Case example:

A 35-year-old manager, stress-loaded and exhausted, presented with anxiety, insomnia, inner unrest, and a predilection for headaches and collapses. She was treated with the following acupoint combination: Heart 9 and 7, Lung 7, bladder 62, Yin-Tang, liver 3, Conductor vessel 20, spleen 6.

The first treatment session resulted in a warm stream in her entire body, a pronounced sensation of relaxation and deep fatigue, resulting in rapid restoration of healthy sleep at night. After three treatment session, the patient was able to go back to work and to tolerate stress. Subjective patient satisfaction was 100 per cent; symptom reduction was 90 per cent.

4. Summary

In this report over 500 acupuncture treatments were carried out with the newly developed Laserneedles. Limitations were reduced by using up to 8 trigger points simultaneously on the body or ear so that all the principle point combinations local, locoregional and far points could be used by the Laserneedles. Treatment was without side effects, extremely patient orientated, pleasant and highly effective in all indications. During the study the number of patients asking for Laserneedle treatment increased considerably. Because treatment is more pleasant for the patient, no needle pricking, and better results are achieved by Laserneedles, acceptance is greater. As our experience showed large groups of patients are willing to use the Laserneedle method. The advantages of Laserneedle treatment in pediatrics are obvious: painlessness and the higher rate of reached De-Qi sensations. Looked at from the economical side, cost of treatment was considerably reduced due to the reduction in number of treatments, therefore expensive pain therapies, psxchotherapy and physiotherapy became obsolete. The patients incapable of working due to suffering from orthopaedic, psychiatric and psychosomatic disorders could also be significantly reduced. We would like to remind you of the frequency of chronic spinal problems, which lead to great financial losses in the economy every year. Using the new Laserneedle acupuncture technology could reduce therapy resistant complaints, especially in older patients, so that the prescription of nonsteroid antirheumatics could be reduced respectively. Therefore unwanted side effects such as ulcers, gastrointestinal bleeding, liver damage and kidneys do not occur. Not to be forgotten and of considerable importance is the special effect Laserneedle treatment has on psychiatric and psychosomatic disorders in connection with anxiety and panic disturbances. These disturbances always present the general practitioner with difficulties, often becoming chronic, very extremely difficult to treat. Patients who are experiencing a difficult phase in their lives, adolescence, mid-life crisis, senile depression, psychological exhaustion and burnout syndrome can be easily and successfully treated. These patients, who have often seen many specialists in their ordeal, accepted Laserneedle treatment exceptionally well. By presenting a new strategy they feel that their problems are being taken seriously. Naturally we advise that acupuncture with the new Laserneedle technology be only part of a concept in the surgery. Before treatment is made a thorough examination and diagnosis of each patient must take place. To conclude, acupuncture treatment with the new Laserneedle technology in the general practitioners surgery is far more superior to the classic metal needle acupuncture methods. One must take into account it's therapeutical results and effects, the duration and effectiveness after treatment and the frequency of treatment. Lastly we would like to mention that remarkable results were achieved with Laserneedles in fields outside the normal usage of acupuncture. Dermatological illnesses, such as crucial ulcers, chronic eczema and acute inflammation of the skin and mucous membranes, etc. were treated with rapid success. We will report on these findings at a later date.

5. Literature

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