Relief of low back pain with low-reactive laser acupuncture techniques.

Kurland H D. Aku.
1999; 27(4):24.

12 patients who had refractory low back pain problems related to spinal arthritis and complicated by herniated discs were treated with GaAs laser acupuncture. Nogier frequencies 2.82 and 146 were mainly used. Used points not indicated in abstract. Effectiveness was observed with immediate improvement in pain and muscle spasms. Elimination of pain medication and improvement in functional activities was progressive in 10 of the 12 patients. Two patients with spinal stenosis failed to maintain improvement for more than a brief period. One had surgical relief of the stenosis and then responded with relief of post-operative symptoms.

GaAs is effective in chronic low back pain.

Two abstracxts from Lasers Surg Med. 1998; Suppl. 10, p. 6 1)Prof. Soriano in Rosario, Argentina, performed a double blind trial with elderly people suffering from chronic low back pain. After a through medical examination the patients were divided into two groups. One received GaAs 4J per point and one received sham irradiation. Ten consecutive sessions were done, one every day. Pain was evaluated through a VAS scale at the beginning and at the end of the treatment period. Treatment was effective in 71% in the laser group and 36% in the sham group. The pain disappeared completely in 45% in the laser group and 15% in the sham group. During the follow up 35% of the patients in the laser group who had relieved their pain more than 60% relapsed, compared to 70% in the control group. There were no side effects. 2)Effects of low energy laser therapy on herniated lumbar discs. Gruszka M et al. Gruszka (Buenos Aires) treated 15 patients with one or more protruded lumbar disc herniations with GaAs 904 nm, with a dose of 9J on each point, 20 to 25 points on the lumbar spine and on referred radicular pain points, 3 to 5 times a week during 4 months. Pain was relieved in 100%, gait and neurological signs improved in all patients, EMGs improved and CAT scans

LLLT USING A DIODE LASER IN SUCCESSFUL TREATMENT OF A HERNIATED LUMBAR/SACRAL DISC, WITH MAGNETIC RESONANCE IMAGING (MRI) ASSESSMENT: A CASE REPORT

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A 40-year-old woman presented at the Abe Orthopedic Clinic with a 2-year history of lower hack pain and pain in the left hip and leg diagnosed as a ruptured disc between the 5th lumbar/lst sacral vertebrae. The condition had failed to respond to conventional treatment methods including pelvic traction, nonsteroid anti-inflammatory drugs and aural block anesthetic injections. MRI scans were made of the affected disc, showing it protruding on the left side through the aural membrane. The gallium aluminum arsenide (GaAlAs) diode laser (830 nm, 60 mW) was used in outpatient therapy. and after 7 months, the patient's condition had dramatically improved. demonstrated by motility exercises. This improvement was confirmed by further MRI scans, which showed clearly the normal condition of the previously herniated L5/SI disc.

Treatment of Low Back Pain

Kazuyoshi Zenba, the president of
Isehara Threrapeutic Institute
PHOTO:"Treatment of Low Back Pain"

Low back pain is said to be a characteristic illness to human beings who started to walk in the upright position. This is caused by the poor posture, the decline of muscular strength and the fatness. In case the conventional therapy such as medical treatments or physical therapies are not effective to a low back pain patient, the low power laser therapy is recomended to take up.
The low power laser can penetrate deep into the human body stimulates receptors of autonomous nervous system relieving the tension of sympathetic nerve and improves the blood circulation of entire body and affected part and mitigates the pain very quickly.
Compared with conventional treatments, the effect of low power laser irradiation will continue for several hours and can be accumulated.
Points of irradiation are tender points or indurated parts, 20~30sec/point, 3~5 minutes in total, if possible daily irradiation is recomended or 3~4 days a week.
Recently, the radicular sciatica, which is difficult to be effected by low power laser has been found to be cured by the repoetition of very short time irradiation of high power laser.
Please inform me through this association for more detaile information.
(An example of laser treatment)
The name of a disease: Protruded lumbar disc
The birth day of the patient :October 10,1953, Sex: male
Development: On the following day when the patient went to dig bamboo shoots he tried to bring up a heavy goods from the floor. At that moment, he felt a strong pain at his back and became cannot move at all. He could not sleep through the night and was carried to our hospital.
Laser treatment: Lying on his side we irradiated the low power laser to tender points of his low back 10~30 seconds at each point.
Result of treatment: Soon after the first treatment, he became possible to keep sitting position and turn over while sleeping. After 4 time treatments, his pain was almost eliminated and started to drive his car.

Low energy laser in the treatment of low back pain

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Low back pain is felt in the low lumbar, lumbosacral, or sacroiliac region. Most low back pain is related to acute ligamentous (sprain) or muscular(strain) problems, which tend to be self limited, or to the more chronic osteoarthritis or ankylosing spondylitis of the lumbar area. The aim of the study was to explore the pain-alleviating effect of low level laser in low back pain .Thirty-five patients with low back pain have been treated with helium-neon laser type "Bistra" with wavelength 630 nm, average output 15 mW and an irradiance of 250 mW/cm2. The laser was locally applied to 11 sites on and around the low back. After scanning each point was treated for 30 sec, five times weekly for a total of ten treatments. The statistical analysis showed that the laser treated patients had a significant faster pain-alleviating effect compared with the 30 patients treated with medicaments only. Subjective response have been achieved after first three treatments. Irradia laser treatment may be a valuable therapy in low back pain and low energy laser can be employed as a pain relieving method.

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Laser therapy: a randomized, controlled trial of the effects of low-intensity Nd:YAG laser irradiation on musculoskeletal back pain.

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OBJECTIVE: To assess the effectiveness of low-intensity laser therapy in the treatment of musculoskeletal low back pain. DESIGN: A double-masked, placebo-controlled, randomized clinical trial. SETTING: A physical medicine and rehabilitation clinic. PARTICIPANTS: Sixty-three ambulatory men and women between the ages of 18 and 70yrs with symptomatic nonradiating low back pain of more than 30 days' duration and normal neurologic examination results. INTERVENTION: Subjects were bloc randomized into two groups with a computer-generated schedule. All underwent irradiation for 90 seconds at eight symmetric points along the lumbosacral spine three times a week for 4 weeks by a masked therapist. The sole difference between the groups was that the probes of a 1.06 microm neodymium:yttrium-aluminum-garnet laser emitted 542mW/cm2 for the treated subjects and were inactive for the control subjects. MAIN OUTCOME MEASURES: Subject's perception of benefit, level of function as assessed by the Oswestry Disability Questionnaire, and lumbar mobility. RESULTS: The treated group had a time-dependent improvement in two of the three outcome measures: perception of benefit and level of function. These results were most marked at the midpoint evaluation ($p < .005$, $p < .01$) and end of treatment ($p < .017$, $p < .001$) but tended to lessen at the 1-month follow-up ($p < .10$, $p < .004$). Lumbar mobility did not differ between the groups at any time. All tests were two-sample t tests with unequal variances. CONCLUSIONS: Treatment with low-intensity 1.06 microm laser irradiation produced a moderate reduction in pain and improvement in function in patients with musculoskeletal low back pain. Benefits, however, were limited and decreased with time. Further research is warranted.