Dynamic Chiropractic

LASERS & TENS

Light on Lasers: Clarence Gonstead and Laser Therapy

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Editor's note: This article is a sequel to Dr. Turchin's "Light on Lasers: The Basics," which was published in the Jan. 29, 2004 issue of *DC*, in the California forum.

Obviously you are wondering why I would mention Clarence Gonstead and lasers. There is no proof that Dr. Gonstead ever used a laser or light therapy. However, if he were alive today, I believe he would be using a laser. Dr. Gonstead was heavily involved in the analysis and treatment of the autonomic nervous system, and he believed in the use of chiropractic and other natural methods to heal the nervous system. He was aware that a patient whose autonomics were stuck in a sympathetic state would not heal as fast as a patient able to fully utilize his or her parasympathetic function. It is now becoming more obvious that lasers and light therapy accomplish one of Dr. Gonstead's main goals: improvement of the function of the parasympathetic nervous system.[1]

Gonstead taught that adjusting the spine without thinking about the autonomic nervous system is not as effective as doing so. He correctly taught that stimulating different parts of the spine could affect changes in autonomic function. This stimulation of the parasympathetic system is especially important in the treatment of chronic pain, since true healing and pain reduction only occur if there is sufficient parasympathetic activity. There are two separate nervous systems: the sympathetic, or "fight or flight" nervous system, and the parasympathetic, or "healing" nervous system. When the parasympathetic nervous system is aroused, it will increase and improve digestion and sleeping, increase sexual arousal, provoke a relaxation response, and/or stimulate healing. Most patients who are self-aware report a powerful feeling of relaxation when being treated with laser therapy. Again, this relaxation response is due to the parasympathetic reaction to photonic stimulation.

One reason that lasers are effective for healing is because the photons have a stimulating, healing and regenerative power for nerves that helps to up-regulate anti-inflammatory chemical mediators.[2] For example, it has been found that laser therapy can stimulate nerve regeneration when compared to placebo or controls.[3] This type of study has been performed numerous times and has been well-established.

Laser stimulation of the autonomic nervous system has created another exciting area that shows promise - smoking cessation. The basic principle is that stimulation of the parasympathetic nervous system can relieve the stress of quitting cigarettes by creating a deep relaxation response during abstinence. I believe this relaxation response is critical to reducing cravings for nicotine, and is a possible explanation for the benefits to be achieved in the area of smoking cessation.[4]

Aberrant autonomic function is one of the prime causes of chronic pain, especially reflex sympathetic dystrophy (RSD - also called complex regional pain syndrome, or CRPS). There is growing evidence that dysfunction of the autonomic nervous system can be improved with laser therapy.[5] It has been well-established that infrared light therapy is capable of stimulating nerve

regeneration. It appears that the photons stimulate numerous processes of nerve cells. Although the exact mechanism is not perfectly understood, it is well-known that laser stimulates RNA and DNA synthesis, cell mitosis, and numerous other cell constituents. These processes are the primary reason that lasers and light therapy seem to have such a profound effect on the nervous system and the treatment of acute and chronic pain.

If you have an interest in laser therapy, look into joining the North American Association for Laser Therapy, the only unbiased laser research society in the United States. The association's Web site is www.naalt.org and includes links to many important laser therapy conferences.

If you have any questions about lasers or laser therapy, please feel free to contact me at the address listed below.

References

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