

Three case studies shed light on the widespread benefits of laser therapy.

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N A SINGLE DAY, THE AVERAGE DOCTOR OF CHIROPRACTIC IS confronted with cases ranging from overuse sports injuries, arthritis in the elderly, and work-related back pain. The chiropractic challenge is to develop programs and acquire the best tools to meet the needs of an extremely segmented patient population.

As you develop treatment programs for diverse patients, your arsenal should eventually contain modalities for a wide variety of conditions. What do athletes, weekend warriors, and aging populations have in common? The answer is simple: pain.

Providing lasting pain relief requires more than popping a pill. Creating a fundamental change on a cellular level is essential to making a prolonged impact on a patient's recovery. This long-term relief is why laser therapy is a modality worth considering.

## **Across the spectrum**

Whether you're looking to complement soft-tissue work, kinesiology taping, or other manual techniques, laser therapy can serve as a strong adjunctive treatment. Laser therapy can also provide value as a standalone modality for conditions that are unresponsive to treatment and for patients who do not care for spinal adjustments.

Often, patients with nagging chronic

pain feel an immediate difference when laser therapy is applied. These patients who are begging for relief when nothing else has worked can become your best word-of-mouth ambassadors.

Laser therapy is commonly used to treat tendinitis, adhesive capsulitis, sprains and strains, sports injuries, post-operative conditions, plantar fasciitis, and similar ailments that present with pain and inflammation.1-3 Other common applications for laser therapy are for symptoms related to postherpetic neuralgia, shingles, TMJ, and sinus issues. The results after treating shingles and postherpetic neuralgia have been life-changing for patients with debilitating chronic pain. The key to these results is providing each patient with the most appropriate dose of energy for his or her condition.

An important parameter to look for in a therapy laser is the ability to manually change treatment settings. You wouldn't give a 90-year-oldwoman the same adjustment as you would a 25-year-old collegiate athlete, so you wouldn't give them the same laser treatment either.

To provide the most effective dose of laser energy, you need the ability to adjust your settings for every condition. Other parameters you may alter during treatments include power, wavelength, and time. Be sure to understand the

concept of target dose; for consistent results you need to administer the correct amount of energy per square centimeter of tissue area.

The following three cases highlight the treatment parameters and results observed for conditions treated with laser therapy. These cases demonstrate the versatility of laser therapy across multiple conditions and patient populations.

## Back in the game

One strong application for laser therapy is to accelerate athlete recovery times. Laser therapy is safe to use directly after injury, as long as there is no active hemorrhaging.

A high-school female soccer player presented with a high ankle sprain not long after incurring the injury. Upon initial evaluation by her orthopedic doctor, he predicted that she might be out for the rest of the season. She was to wear a boot and be off her foot as much as possible for two weeks and then reevaluate for a physical therapy plan.

Devastated by the consequences this might have to her upcoming full-ride soccer scholarship to a university, the patient's parents explored alternative treatment options. She was evaluated and then treated with a Class 4 deep tissue therapy laser.

Laser therapy was applied to her

ankle and lower leg; the goal was to treat both the injured area and the inflamed surrounding tissue. This area represented a significant portion of her lower leg and required 7,200 joules to provide a therapeutic dose.

The first treatment lasted eight minutes and was administered at 15 watts. Her sprain was treated with conservative power output upon presentation because of its acuity. Many practitioners elect to treat acute conditions "low and slow." The goal is to provide the injured area with a therapeutic dose without treating it too aggressively in the beginning stages of an injury. Power then can be progressively increased based on patient response.

After positive results, the second treatment was administered at 18 watts, and the third was delivered at 20 watts. In both cases the patient received 7,200 joules to the affected area. After three treatments in four days, the patient went out of town for a week and rested her ankle.

She was then cleared by her physical therapist to return to playing soccer with no limitations after her third treatment. All of this occurred before she was scheduled to start physical therapy.

The patient had a total of four treatments and finished the season helping her team advance to the playoffs. Her speed of recovery and return to full-intensity performance came as a surprise to her parents, orthopedic physician, and physical therapist alike.

## A glowing recommendation

A 68-year-old male presented with severe shingles. He could not lift his head because of the blistering on his neck, across his left trapezius, and along the nerve branches from the front of his chest to the back surrounding the scapula. He had been in this condition for weeks. Anti-viral medication, pain medication, and steroids failed to provide relief. He then turned to laser

therapy as a last resort.

He was initially treated with 6,000 joules; this dose was applied to all blisters along the dermatome, additional nerve branches of the chest, and upper back on the left side. Treatment was administered at 8 watts for 12 minutes.

Laser therapy is noninvasive and can be delivered by noncontact methods therefore the patient tolerated treatments well. After the second treatment, he was 75-percent improved. With much of his range of motion regained, he could lift his head without pain.

He continued his treatments for seven sessions over a two-week period. At his seventh session he reported being symptom free. In the patient's words, "This treatment is amazing and has given me my life back. I will tell everyone I know about this. Especially those suffering as I was from shingles."

# Seeing is believing

Many practitioners are reaching for high power, Class 4 laser therapy as an intervention for postherpetic neuralgia as more research supports it as an effective treatment for this uncomfortable condition.<sup>4</sup> These cases are often the most transformative for patients, while offering high impact for practitioners. Many laser-therapy skeptics are converted to believers after seeing postherpetic neuralgia results.

A patient presented with postherpetic neuralgia on her face, a condition that had been persisting for two years. Her eyelid was drooping noticeably from the condition and she was in constant pain on the side of her face. If anything touched or brushed up against that area, the pain was intense.

The side of her face was treated, and care was taken to avoid her eyes by using laser-safe eye protection. After only one treatment, her pain was completely resolved. Two years of chronic pain halted after a few minutes of laser therapy. While many other treatments had been administered, this was the one that produced lasting

results. She has not needed to return for further treatment.

Laser therapy can also be instrumental in alleviating tension headaches accompanied by neck pain and stiffness. Many report a 50 to 75 percent range-of-motion increase immediately post-treatment, and full headache resolution within an hour.

## Go toward the light

Laser therapy can open the door to treatment options you never knew existed. As more research emerges and patients and practitioners see real-world results, this treatment modality is on the brink of becoming widely accepted.<sup>5</sup> This technology is not only effective for your patients but also serves as a liaison to practice growth and an increased bottom line.

With another cash-flow revenue stream, you set yourself up for referrals from happy patients sharing their success stories with others in the community. The applications of laser therapy are vast—if you haven't looked into it yet, now is the time. 

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