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'This is Different'

Powerful laser therapy is a game-changer for LSU Tigers

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In 2014, after talking with our peers in professional and college athletics, we decided to take a look at deep-tissue high-powered therapy lasers. A good friend and colleague, who is head athletic trainer for a professional baseball team, was

especially convincing when talking about how positive his players had been responding to treatments.

With an open mind, we decided to evaluate Class IV laser during spring football workouts. It didn't take long to realize that

this modality is different. While we'd had plenty of experience with low-level lasers over almost a decade, we'd never seen the level of results we were experiencing.

Additionally, players were asking for and anticipating laser therapy treatments. Results were global, and not specific to one athlete or injury. Before long we realized this was a powerful tool that, when implemented properly, had the potential for making a lasting impact on treatment outcomes.

COURTESY LSU ATHLETIC TRAINING DEPT.

Historical Perspective

In our environment, we are inundated with new technology boasting the next “breakthrough” treatment option. Every time a player goes down with an injury we hear about the next greatest cure-all. Most are fads or unsubstantiated technologies.

Still, we believe in keeping an open mind and being aware of advancements that can make a difference. Research is evaluated as a starting point, but even the most scientifically proven technology will have a difficult time holding up if it’s not reasonably easy to implement and if the players don’t like it. We look for treatment options that are both proven and practical, and most importantly, provide results we can rely on.

Laser therapy has been a lingering modality in athletic training rooms around the country for years. In our opinion, the technology as a whole has gotten very mixed reviews since its introduction to athletic training and physical therapy over 10 years ago. At LSU, we decided to not invest in the technology in the past because of what we deemed a lack of research, inconsistent results, long treatment times, and lack of athlete buy-in.

When we decided to open up to a high-power laser evaluation, we reviewed the latest research and spoke to our peers. Once implemented, we immediately witnessed measurable progress. Our athletes kept coming back to the modality, and we were able to accommodate treatments in short 3-5 minute sessions.

We tested it in other sports on a wide variety of conditions. Before making an investment, we needed to know it could be a fit for our environment. What we now know is that not all lasers are created equal. The struggles and inconsistencies we encountered when laser therapy technology was young are now issues of the past.

The Class IV Difference

The ability to deliver a large amount of laser energy to larger body areas has been a huge advantage over what we’ve experienced in the past. Put simply, we are able to do more in a shorter time.

The practicality of the treatment makes it a great fit for our environment, where we have large athletic players and time is never on our side. We’re able to treat deeper into tissues with more energy.

Previously, the approach was to hold the laser applicator in one spot for a long period of time, then move it a few centimeters and treat again. We didn’t feel confidence in large body areas, though it did seem to provide decent results superficially. Still, the flexibility and ease of use were not ideal. It didn’t take long for us to move past this limited approach.

The ability to treat deep tissue structures fast was a game-changer. We quickly grew to realize that Class IV laser therapy was a completely different kind of technology.

Getting in Contact

Another difference-maker is the ability to deliver laser therapy in a manual technique mode. We like to use our hands a lot, so treating on contact allows us to treat with both a modality and our hands at the same time. A laser delivery system with a massage-type ball allows practitioners to dig in and manipulate tissue structures while delivering energy.

When we treat athletes with our hands and the laser, the athlete feels the soothing warmth of the treatment while getting a release from the manual component of therapy. We do this most commonly on muscle and ligament sprains and strains. We know that things are happening on a cellular level and the athlete can actually feel the treatment working. This approach helps us get deeper into the affected tissue.

One of our players had a nagging hamstring injury that just wouldn’t get back to 100%. One intervention we focused on was laser in contact mode. We feel that we were able to get that player over the hump because of the laser and our ability to work that area. The player’s confidence in the hamstring reached the level we were shooting for, and the player did not experience further issues.

Seek to Understand

Setting aside the time and effort to evaluate laser technology was the first step, followed by committing funding to make the investment. Not to be overlooked, however, was the commitment we made to be trained and educated on how best to use the device so we could maximize our investment.

As we grew to understand the technology and witnessed results in many different conditions, our demand for more units has grown (we now have five Class IV lasers). We would not have gotten to this point without educating our staff on the versatility of the laser and how to apply it properly. We made sure we weren’t left on our own to make it work for our program. There was a significant amount of educational support that went into our adoption of this technology.

We were shown how to treat and what technique to use for different conditions. We received treatment tips for specific acuity presentations. And perhaps most importantly, we were trained hands-on as we treated actual cases. The condition-specific training we received made all the difference.

Another key component of our training was learning how to use laser therapy adjunctively with other modalities and treatment techniques. We use instrument-assisted soft tissue mobilization, myofascial release techniques, the fascial distortion model (FDM), and other interventions. When we back these up with laser, the treatment site seems to get even further “excited,” and we see expedited recovery times.

Moving Forward

With the advent of deep-tissue laser, we’ve moved past modalities such as muscle stimulation and ultrasound. These work well as short-term fixes, but for a more lasting impact, we’re moving on to new modalities.

Powerful laser therapy is one of these options, because of its ability to provide more consistent results over time. It’s made a difference for us and we believe in it because of the outcomes we see. Our players believe in it because it helps them feel their best.

We’re proud of the work we’ve put in to get to the point we’re at, and feel that this modality gives us an edge when treating the challenging conditions we see every day. ■

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