

A special advertising section

Combine therapeutic laser, acupuncture

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For The Education Center

Both acupuncture and laser therapy are most often used to treat the same or similar conditions in veterinary medicine. Which one is better is often a contentious topic of debate among acupuncturists and laser fans. I posit that both are very useful tools and do not need to—and should not—be utilized exclusively of the other.

Acupuncture and laser therapy can be used together for painful, inflammatory conditions such as arthritis, intervertebral disc disease and wound management. Acupuncture can be employed to treat other conditions—seizures, heart disease and chronic renal disease, to name a few. Generally, we would not try to treat these and similar disorders with laser therapy.

To begin to compare, it is important to understand what occurs at a physiological level with both modalities. Acupuncture has been shown to stimulate nerve bundles deep in the skin, release pain mediators and stimulate blood flow. Laser therapy has been shown to ramp up adenosine triphosphate (ATP) production in damaged or diseased cells, decrease inflammation, release pain mediators and increase blood flow. Of course, much still needs to be studied about the physiologic effects of both treatments.

Know the Limits

Understanding the contraindications and other limiting factors with each modality is important.

Acupuncture, for example, often cannot be used with an uncooperative or needle-phobic patient. It can be time-consuming for the veterinarian. Also, needles should not be placed through areas of pyoderma or directly into or around tumors.

Laser therapy can have a costly initial investment. It is not used to treat noninflammatory internal medicine conditions, and it can cause injury when not used properly. It should not be used to treat over or around tumors.

Acupuncture can be used to treat cancer patients, however, and a recent study has shown that laser therapy can slow the growth of some tumors in vivo, although more research needs to be done before this is performed in practice.

When used to treat conditions for which both have been shown effective, which is best? The answer depends on several factors, primarily the patient, client and provider of the treatment.

The Patient

For traditional acupuncture, patients must not only permit needle placement, but they must be relatively still for 20 to 30 minutes. Not all patients will cooperate.

Aquapuncture—the injection of a fluid into an acupuncture point—can be used on those who won't settle for extended periods, but it cannot be used in many needle-phobic or fearful patients. These patients may respond better with laser therapy, which requires less handling and can be stopped during treatment to allow the patient a break.

The Client

Finances and schedule constraints can be challenging with either modality. A frank discussion with the client regarding anticipated costs and time commitment—including long-term treatment expectations, when appropriate—is essential when the initial treatment recommendations are made.

Arthritis, for example, requires long-term treatment using either modality, and the frequency of treatment

depends on the patient, the severity of the disease and the response to treatment. Some therapeutic lasers are portable, which could provide extended revenue to the clinic. A trained staff member could provide after-hours laser therapy home visits to accommodate client schedules.

The Provider of Treatment

Experience goes a long way in reaching the correct diagnosis and providing the best treatment. In this respect, consider surgery with a scalpel or with a CO₂ laser. Both are effective, both have their pros and cons, and both are best when used in the hands of someone who has experience and is comfortable with either style.

Neither acupuncture nor laser therapy should be performed without proper education. Acupuncture should be done by a trained veterinarian, and laser therapy should be performed by either a veterinarian or a staff member trained in the safe use of therapeutic lasers and on the specific laser unit. Employees also should have a good understanding of patient anatomy.

Sometimes, acupuncture and laser therapy together are better than either alone. As a rehabilitation therapist, I routinely use both to treat the same patient, particularly those with multiple disease processes or neurologic patients. I often get better results using the two modalities together, although sometimes I have to choose between them due to patient or client limitations.

In these cases, my experience with both tools allows me to choose the modality I think will work best. Sometimes I'm wrong; in these cases I simply switch to the other modality when possible. Each veterinarian should choose which modality to try first. The important thing is that you and your clients have options.

Enter Laserpuncture

So what about using a therapeutic laser to treat acupuncture points—a practice known as laserpuncture? Quality studies are lacking. Until there is better evidence that lasers stimulate acupuncture points in a manner similar to needles or aquapuncture, I opt for laserpuncture only when I strongly believe acupuncture will be of great benefit and the patient will not permit

me to treat them with traditional methods (or they have pyoderma over the points I would treat).

Because quality studies in laserpuncture are lacking, debate is ongoing on the proper settings. Generally, I choose to treat each point for 40 to 60 total Joules, which is much higher than traditional target doses for larger areas of tissue—5 to 30 J/cm² depending on target tissue type.

Again, this is based on my experience only. Some laser units come with preset applications that may be useful. (When using a Class IV laser, the operator is reminded that the treatment technique with higher



Due to temperament and personality, Sophie, above, was not a candidate for acupuncture, so laserpuncture was a good option. Speedy, left, was cool with both laserpuncture and acupuncture.

power devices is always continuously moving and never held over the acupoint in one place. Care must be taken to safely administer a dose of 40 to 60 Joules per point, and a combination of lower treatment power or pulsing may be utilized to achieve this.)

Most importantly, as with any treatment, use objective measurements to monitor the response to treatment. Both acupuncture and laser therapy are prone to placebo effect; clients want their pets to get better. When dealing with lameness, neurologic deficits and wounds, video and photography are invaluable for monitoring treatment.

In summary, the more tools you have and the more you utilize those tools, the better your patient outcomes will be, as long as you practice safely and monitor the treatment response. ●

Dr. Terri Rosado earned her DVM at the University of California, Davis, and completed an internship at the University of Florida in small animal internal medicine, emergency medicine and surgery. She is certified in mixed animal acupuncture by the Chi Institute. She opened Flagler Integrative Veterinary Center in Flagler Beach, Fla., in 2012.

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