

# Laser Therapy

A lot of people are interested in the concept of a drug-free, pain-free, surgery-free alternative to management in their animal, but intelligent, discerning owners often ask me: “But How Does It Work?”

- Laser Therapy uses “cold” laser light of low intensity to stimulate tissues to heal. Healing occurs by a number of physiologic mechanisms.
- Laser light dilates blood vessels in the area of application. Dilated blood vessels can carry de-oxygenated blood away and bring in freshly oxygenated blood faster. The departing blood will also carry away deleterious by-products of injury and bring in fresh cellular nutrients, allowing cells to rejuvenate faster.
- Lymphatic vessels are also dilated, allowing edema-forming lymph fluid to escape injured tissues, reducing swelling. This reduces pain.
- Laser light desensitizes local nerves so that they cannot fire as quickly, and send fewer pain signals to the brain.
- Healing tissue fibers called collagen align themselves in a more linear, uniform, “normal” direction when exposed to laser light, reducing scarring and improving the tissue strength of newly healed wounds faster.
- Bacterial growths (and probably viral reproduction) are inhibited by exposure to laser light, making laser treatment helpful in treating non-healing wounds, contaminated wounds and burns.
- Laser light stimulates the “battery pack” of cells, called mitochondria. The mitochondria can then produce more ATP, which helps cells do more work. Cells can then get rid of biologic waster products more quickly and efficiently. They can heal and turn over depleted by-products faster. They can also reproduce faster, resulting in faster healing.

By these mechanisms, Laser Therapy provides us, at Crossroads Veterinary Clinic, another weapon against pain, either as a drug-free option or with standard treatments to enhance comfort beyond the ability of drugs alone. Wounds can be encouraged to heal faster, stronger, with less infection and less pain.

Laser Therapy has been very helpful in treating our patients with:

- Tendon Injuries
- Ligament Injuries
- Joint Injuries
- Back and Neck Injuries
- Osteoarthritis
- Post Surgical Pain
- Snake Bite Wounds
- Non-healing Wounds
- Non-surgical Open Wounds
- Many other conditions as determined by Veterinarian.



If your animal has any of these conditions and you would like to offer them another form of relief and a faster road to recovery, ask Dr. Williams or any of the CVC staff for more information about laser therapy.

# LASER THERAPY FAQ'S

## **How do I get started with laser therapy?**

At Crossroads Veterinary Clinic we have many different treatment plans to meet your animal's needs and still fit your busy schedule. Before treatment begins, it is recommended to have your animal examined by our Veterinarian so a therapeutic treatment protocol can be formed to give the best care. We can always make a schedule tailored to your busy lifestyle. Talk to one of our great staff members for more information.

## **What actually happens in a laser treatment session?**

In a laser treatment session, your animal will be taken into a comfortable area during treatment. Staff members will talk you through each step of the treatment. The laser is placed on the desired area and when turned on it emits a cool, red light ray into the tissues that penetrates 12cm.

## **How long does a laser session last?**

Most treatment sessions last an average of 5-30 minutes depending on the number of areas being lasered. You can stay with your animal while the therapy is administered, or you can drop off your animal and return to pick them up later that day.

## **What is actually lasered in the treatment session?**

There are several areas of the body that laser therapy benefits. Laser can be used for injuries, the skin due to wounds, the joints due to arthritis, etc..... The list of areas to laser is unlimited. The only area not able to be lasered is the eyes. The laser penetrates 12 cm (5 in) so is able to treat any size animal.

## **Are there any side effects to laser therapy?**

Laser therapy has no side effects and is extremely safe!! It does not affect any organs, including the liver and kidneys, like certain medications do. This makes laser therapy a great alternative treatment in older animals or animals with conditions that will not allow them to take certain prescription drugs.

## **What does laser therapy cost?**

Price is based on the number of sites being lasered. Laser sessions can be purchased individually, but there is a discount if you purchase 6 at a time. Ask one of our great staff members for exact pricing for your animal's individualized sessions.

## **What is an ideal protocol for arthritis?**

The ideal protocol for arthritis is to perform 6 treatments in a 2-3 week period to get full activation of the cells using a 3-2-1 protocol (3 days the 1<sup>st</sup> week, 2 days the 2<sup>nd</sup> week, and 1 day the 3<sup>rd</sup> week). This "activation" period is then maintained with a single treatment every 4-6 weeks for life. Results may vary from animal to animal. For best results it is best to keep your animal under reduced activity as to not over exert themselves. If your animal is taking part in multiple laser therapy treatments, there must be at least 24 to 48 hours of rest in between each session.

**Feel free to contact us at any time to discuss laser therapy to see if it is right for your Animal!!**