State of the Art Laser Surgery

What is laser surgery?
A Laser, which stands for Light Amplification by Stimulated Emission of Radiation, is an opto-electronic device that produces highly concentrated light rays collectively called a beam. In a surgical field, this highly focused laser beam is used on living tissue to ablate, or remove tissue, and to seal small blood vessels, nerve endings, and lymphatics. The result is a significant benefit to the patient both during and after the surgical procedure.

Depending on the type of surgery being performed, different laser types are used based on the wavelength of light they produce. The most commonly used laser for soft tissue surgery is the CO2 laser, which has a wavelength of 10.6 micrometers. This wavelength is highly absorbed by water in soft tissue structures, making it the most efficient and precise surgical laser used in soft tissue surgeries today.

At Grace Animal Hospital, many of our surgeries are accompanied by our CO2 laser. Take a look at the benefits laser surgery provides to your pet:

Less Bleeding: As the laser cuts, it also seals small blood vessels, which significantly reduces tissue bleeding during a surgical procedure.

Less Pain & Swelling: During surgery, the CO2 laser seals nerve endings and lymphatics which results in less pain and swelling post-operatively.

Reduced risk of infection: One of the unique features of the CO2 laser beam is that it efficiently kills bacteria in its path, producing a sterilizing effect.

Faster recovery time: Less bleeding, less pain and swelling, and reduced risk of infection all help the patient to recover more quickly and more comfortably following surgery.

In addition, there are many benefits the CO2 laser provides to the surgeon performing the surgery. Less bleeding and enhanced visibility of the surgical field, as well as increased precision and control, all help to provide improved surgical results.

For more information on laser surgery at Grace Animal Hospital, please contact us at (304) 848-2420