

## **Radio-surgery - Beyond the LASER**

Your pet may be eligible for usage of our Radio-surgery unit during his or her procedure. We are pleased to offer this technology as it is sometimes critical for our smaller patients to minimize fluid loss and pain during and after surgery.

How does it work? Radio-waves energize the instrument (an electronic pen-shaped micro-instrument with interchangeable tips) used for surgery allowing a clean incisions to be made, blood vessels to be sealed while minimizing tissue destruction. Healing is rapid after radio-surgery and pain is minimal.

Radio-wave surgery is low temperature, minimizing the risk of tissue damage or burning.

### **Benefits to the patient:**

- Inexpensive
- Decreased post-surgical pain
- Decreased post-surgical swelling
- Decreased bleeding
- Reduced risk of infection
- Quicker recovery
- Safer than LASER and electro-cautery
- No burning or charring of the tissue

### **Benefits to us:**

- Quicker surgery time
- Improved visibility of surgical site
- Hemorrhage control
- Maximal patient safety
- Bacteria free incision
- Inexpensive



Blood-free incision made with radio-surgery unit.

## **Ultrasound:**

Ultrasonography is a method of diagnosing body structures with a machine called an ultrasound. With an ultrasound, sound waves are sent into the body from a hand-held probe that also reads the reflected waves as they bounce off of internal structures. An image is then generated from the machine that is a picture of the body's internal organs giving a doctor visualization of what's going on inside of the patient's body. From this image, the doctor can diagnose diseases without causing pain to the patient.

### **Common uses and benefits of ultrasound:**

**Pregnancy:** A doctor can use an ultrasound to see if there is pregnancy or if there are any complications before birth.

**Internal Organs:** Ultrasonography can also be used to check major organs and make sure there is no disease or lesions.

**Heart:** Some heart diseases can only be diagnosed on ultrasound imaging. This is called echocardiography.

**Live Images:** Most devices used for taking images of the body will only take a still image, but with ultrasonography, the doctor can see what is going on in the body live.

**Biopsy:** Ultrasound is used commonly for taking biopsies of diseased organs without having to perform full surgical exploration. This is less painful to the patient, less expensive and provides for a quicker recovery.

**Comfort:** There is no discomfort when using ultrasonography and there are no side effects from this process.

**Expense:** Even though ultrasonography can be a more helpful way of investigating the body, it is actually less expensive than other methods like X-rays, C.T. scanning or M.R.I.



Scanning a Cuban boa for reproductive problems.



A abdominal image from a reproductively active parrot.



An ill cockatiel with fluid buildup in the abdomen secondary to the ovarian granuloma visible in the bottom right region of the screen.



Positioning for an Iguana kidney ultrasound study.