THERAPEUTIC ULTRASOUND

What is it? Therapeutic Ultrasound provides sound waves that penetrate into tissue such as muscles or ligaments. The sound waves heat the tissue, which is the effect we are after. Warmth relaxes muscles, improves circulation and reduces pain, just as a hot bath does for us. Warmth from a bath or a heating pad only penetrates a cm or so into the body. The ultra-sound wave warms tissues several cm under the skin. Ultrasonic jelly is used to transmit the waves of sound from the ultrasonic head through the skin and below. The head contains a crystal that vibrates, producing the ultrasonic wave.

Why is it helpful? Ultrasound has been a mainstay of both human and animal rehabilitation for years because of its documented beneficial effects. The most basic of physical therapy tools are heat and cold. Ultrasound provides a way to get heat into tissue. This increases blood flow, which in turn improves tissue nutrition and healing. It also stops the cycle of pain leading to muscle tension which leads to more pain, by relaxing and soothing tense muscles. Ultrasonic waves cause tissues to vibrate, which gives it a "micromassage" effect, also useful to tissue healing.

What types of cases can benefit? Its most common uses are for muscle pain and spasms, or tendon and ligament healing. It feels very soothing to the patient.

How long does it take? For useful effect, tissues temperature must be raised for at least five minutes. Most session will be 10-30 minutes depending on the size of the pet or area needing to be treated. If ultrasound is needed it usually will require several sessions, anywhere from daily to twice a week. For acute injuries treatments are generally done three times a week for 1-2 weeks. For chronic conditions sessions tend to be longer, are done 1-2 times per week, and may be continued for several weeks.

What else do I need to know? We will need to shave the hair at the site we are treating, so your pet will have one or more bald spots for a while. Ultrasound can occasionally cause burns if used incorrectly. Care must be taken when using ultrasound over joints or bone plates. It should not be used over areas with tumors, infection or blood clots, or near the heart, eyes or a pregnant uterus. It should also not be used over the growth plates of growing bones.