

ULTRASOUND CLIENT HANDOUT

WHAT IS AN ULTRASOUND EXAM?

An ultrasound exam is a way of looking inside a patient's body without having to perform surgery. The ultrasound machine sends sound waves into the body, then listens for the echoes. The machine then uses these echoes to form a picture of the inside of the patient. These sound waves are too high in pitch for us, or any of our patients, to hear and produce no harmful effects as a diagnostic tool.

WHY AN ULTRASOUND EXAM?

Ultrasound exams are performed for many reasons. In human medicine, most of us think about ultrasound exams during pregnancy, however, in veterinary medicine, because ultrasound is a safe, non-invasive way to look inside the body, it has become a very useful tool with numerous indications.

WHAT INFORMATION IS OBTAINED DURING THE ULTRASOUND EXAM?

Ultrasound allows us to examine internal organs for location, size, shape, texture, and blood supply. Unfortunately, ultrasound does not usually show how well a specific organ is working. Organ function is determined by other tests such as bloodwork, or sometimes additional imaging. Ultrasound is very good at finding "masses" within the organs, however, ultrasound cannot determine if the mass is benign (non-cancerous) or malignant (cancerous). A fine needle aspirate (obtaining a very small sample of the tissue with a needle), is a minimally invasive procedure that is necessary to determine whether the mass is concerning or not and what further treatment would be indicated.

WHY DOES THE PATIENT HAVE TO FAST?

The patient should not eat after midnight the night before the ultrasound. Obtaining diagnostic images of the organs is difficult when the patient has food in their stomach.

WHY DOES THE PATIENT HAVE TO BE SHAVED?

To obtain the best ultrasound images possible, good contact between the ultrasound probe and the patient's skin is required. The patient will need to have the fur/hair shaved from the area being scanned. Fur will grow back in ~3-4 weeks.

CAN OWNERS BE THERE DURING THE ULTRASOUND?

The patient will be brought by a trained veterinary technician/assistant to the ultrasound room. Due to the size of the room and the technical aspects of performing an ultrasound exam, we do not permit owners to accompany their pet to the treatment area. Just as in human medicine a registered diagnostic medical sonographer and a radiologist will perform the ultrasound exam with written imaging interpretation (radiology report) produced by a board certified veterinary radiologist.

WHAT ACTUALLY HAPPENS DURING THE EXAM PROCESS?

The ultrasound exam is performed on a padded table while the patient lies quietly on their back in a dimly-lit room for approximately 30 to 45 minutes at a time. If the evaluation lasts longer than expected, the patient will be given breaks to stretch. A warm water-based gel is applied to the area being examined and the ultrasound transducer is gently moved along the patients' skin. Most pets will relax enough to enjoy the undivided attention and ear rubs during the exam, while others rest peacefully. For the majority of the exam, minimal pressure is applied. Sometimes, to obtain a good image, the patient may experience a slight "pushing" against their abdomen. This can be uncomfortable and even painful depending on the patients' condition. For this reason, the patient will be gently restrained by the veterinary technician/assistant. Sedation may also be administered in cases where the patient is difficult to restrain or in pain. All patients will be monitored while undergoing an ultrasound.