

ULTRASONOGRAPHY

Ultrasonography uses sound waves, which pass into the patient and are the absorbed or reflected to the transducer by different tissues to obtain real time images from within a patient's body. Ultrasonography is non-invasive and is often used to examine the abdominal organs such as the liver, spleen, pancreas, bladder and gastrointestinal tract. It can also be used to assess the eye, chest, tendons and subcutaneous soft tissue structures.

Echocardiography is a form of ultrasonography specifically focused on examining the beating heart, with the ability to measure the velocity and direction of blood within the individual chambers and vessels.

Ultrasonography is performed by means of our high-end ultrasound machine, a GE logic S8. The machine has a variety of ultrasound transducers for optimal viewing of a range of body parts. Its cardiac configuration with simultaneous ECG assessment allows for optimal assessment of the heart. A patient may be referred for ultrasonography to investigate conditions such as:

- Abdominal pain
- An abdominal mass
- A suspected gastrointestinal foreign body
- Bladder stones
- Pancreatitis
- Portosystemic shunts
- A heart murmur
- Fluid in the abdomen or chest

Ultrasound guided fine needle aspirates and biopsies can also be conducted to safely and accurately obtain samples of tissues to help diagnose pathology as well as to sample fluid to determine its nature and origin.

Patients need to be fasted overnight for ultrasonographic examinations as gas and food in the gastrointestinal tract make it difficult to see underlying organs. Ultrasonography of the abdomen frequently requires that the patient be lightly sedated to optimize imaging and facilitate easy fine needle aspirate sampling. A general anaesthetic is only required for core tissue biopsies.

