



Ultrasound

- Ultrasound uses high frequency sound waves to produce images of the body. It is used in many situations. The following are examples of where ultrasound is routinely used and is not an exhaustive list.
 - Monitor the growth and health of an unborn child, as well as detect complications of pregnancy
 - Assess lesions (such as a neck mass) and can be used to guide a biopsy
 - Assess organs within the abdomen (for example the liver, the kidneys and the aorta)
 - Assess organs within the pelvis
 - in females, this may involve a probe placed via the vagina to assess the reproductive organs
 - in males, a probe may be placed in the rectum to assess the prostate
 - Assess the structure and function of the heart chambers and valves
 - Assess muscle tendons and ligaments around joints
 - Using special ultrasound characteristics, assess blood flow within blood vessels
- The basic component of the ultrasound probe is a crystal. It produces high frequency sounds waves that are directed towards an area under examination. The sound waves are reflected by various structures depending on their density. These reflected waves are analysed by a computer to produce a real-time image seen on the screen. There are a range of ultrasound probes used in specific situations.
- In order to prepare for the test you should wear loose clothing. You may be asked to change into a gown to make the examination easier. In most cases no special preparation is required for the investigation. However, depending on the area of the body that is being examined you may be asked to;
 - Fast prior to the scan
 - Have a full bladder

You will be told by your doctor if there are special requirements for your test.



- The ultrasound may be performed by the radiologist or an ultrasound technologist. In most cases you will lie on a couch. The ultrasound probe will be placed on the skin, overlying the area that is to be examined. Lubricating jelly is used to ensure that there is good contact between the probe and the body. The ultrasound is painless. Depending on the area of the body being examined it can take between 20-40 minutes.
- Ultrasounds are safe. They are unlike other imaging tests that produce radiation. No adverse effects have been identified.
- Once your scan has been completed you will be advised to return to your referring doctor for the results. The radiologist will issue your doctor a report, based on the findings as well as the history provided on the request form. Depending on the policy of the radiology practice who you are referred to, you may be able to have a hard copy of your ultrasound or a CD to keep for future reference.

