

## What is an Ultrasound Scan?

An Ultrasound scan uses high frequency sound waves to create pictures of soft tissues (eg. muscles, tendons, glands) and organs inside the body (eg. kidneys, liver). The non-audible sound passing into your body is safe because it doesn't use radiation. For this reason Ultrasound is often used for monitoring foetal growth in pregnancy. Ultrasound equipment uses a hand held scanner (transducer) which the operator (Sonographer) places against your skin and moves around the area for imaging. The transducer emits sound and detects the returning echoes from the target area and this information is converted to a moving image displayed on a screen.

## How do I prepare for an Ultrasound Scan?

The staff at High St Xray will advise you if there is any special preparation required when you make your appointment.

For some scans, you will need to fast (not eat or drink fluids, except for sips of water) for several hours before the test. And for other scans you may be asked to drink approximately 500ml – 1L of water and not pass urine so as to have a full bladder at the time of your examination. A full bladder helps to improve the view of certain structures ensuring



optimal images can be taken. Your preparation needs to be considered in view of other medical problems such as diabetes or heart failure, in which case you are advised to discuss this with your doctor or High St Xray staff. You will need to bring your referral and any previous x-rays or scans with you to your appointment.

## What happens during an Ultrasound Scan?

You will be asked to sit or lie down with the area to be scanned exposed. You may be asked to change into a gown, but you will be covered during your examination except for the area required to be examined.

The Sonographer puts a gel on the area of your body to be scanned to ensure the transducer makes good contact with the surface of the body. The transducer is then held against the area for imaging and moved around to give different views. This is generally not painful, although some pressure may need to be applied to improve visualization. Tenderness to probe pressure can be often a useful finding, so please advise the Sonographer if you experience this. You may be required to breathe in deeply in order to keep your organs still for a short amount of time and to allow them be seen adequately.

The Sonographer watches the Ultrasound image on a monitor as they move the transducer around and still images can be recorded.

## **Are there any after-effects associated with any Ultrasounds scans?**

Ultrasound is safe and harmless. It is possible to go about your normal activities straight after scans, but this may not apply if your scan has been accompanied by an injection. If an injection is part of your study you will be advised of any precautions and in some cases you may be advised not to drive, do any heavy lifting/work for several hours after an injection.

## **How long does an Ultrasound Scan take?**

The time varies depending on the complexity of the study. Most simple Ultrasound scans take about 20 minutes to be completed; however more time is required for some studies, particularly those which examine the arteries and veins. When the test is over, it may be necessary to wait while the images are reviewed to see if more are needed.

## **What are the risks of an Ultrasound Scan?**

An Ultrasound scan does not have any known risks, side effects or complications and is considered to be very safe.

## **What are the benefits of an Ultrasound Scan?**

An Ultrasound scan does not involve radiation. Ultrasound scans are widely used and provide a quick and effective means of getting information about internal parts of the body. The internal structures being viewed are able to be appreciated in real-time (i.e. moving) which is of particular benefit for viewing muscles, tendons and blood vessels. It is usually a painless procedure that does not require any anaesthetic or sedative.

