

## **PATIENT GUIDE TO ULTRASOUND**

### **What is an Ultrasound Scan?**

Ultrasound imaging is a method of acquiring information about the inside of the body using high-frequency sound waves. Because ultrasound examinations are captured in real-time, they can show the size, shape and texture of the internal organs and blood vessels. Ultrasound waves cannot pass through gas. As a result, the lungs, stomach or bowel cannot be evaluated. The examination is painless and does not involve ionising radiation.

At Mourne Scan Clinic, we accept ultrasound referrals from g.p.'s and all other relevant medical practitioners. We also accept self-referrals, however if you are unsure of what sort of ultrasound scan you require, please speak to your g.p. or midwife.

### **How is it performed?**

For some ultrasound scans, patient preparation may be required. Detailed instructions are given at the time of booking your appointment. These are also detailed below. For certain scans you may be required to fast, whilst for others you will be asked to drink several glasses of water and to fill your bladder prior to the examination.

You may be asked to change into a gown before your scan. During the procedure you will be asked to lie, usually face up, on the ultrasound bed. A gel is applied to the skin and an ultrasound probe (transducer) is moved over the gel to acquire the images.

Most examination takes approximately 30 minutes to perform.

### **How does it work?**

Ultrasound refers to high frequency sound waves that are inaudible to the human ear. Ultrasound imaging is based on the same principles as "sonar" utilised by boats and submarines.

During the scan, ultrasound waves are directed into the body. When they strike an organ within, they are reflected back creating an echo. The strength of the echoes returned depends on the consistency of the structure. These returned echoes are instantly measured, converted to an electrical signal and displayed as a shade of grey. As the numerous echoes return as shades of grey, an image is gradually built up.

### **Risks**

Standard diagnostic ultrasound examinations have never been shown to cause harm. We use the 'As Low As Reasonably Achievable' (ALARA) principle when scanning. The study of ultrasound safety continues to be reviewed by professional bodies and Mourne Scan Clinic will always keep updated accordingly.

### **When and where do I get the result?**

On completion of the scan, the ultrasonographer will inform you of the result and if needed give you a copy of the official report as well as any necessary follow up. This report can also be emailed or posted to your general practitioner and/or referrer on request and with your consent.

**Any other questions?**

If you have any other questions, worries or doubts, please do not hesitate to ask one of the staff, or contact us prior to your appointment.

**PATIENT PREPARATION FOR ULTRASOUND****ABDOMINAL ULTRASOUND:**

- Six hour fast (No tea or coffee)
- Sips of water may be taken if required

**PELVIC ULTRASOUND:**

- Drink 1.5 litres of water.
- Patients should start drinking one and a half hours prior to appointment time.
- Water should be finished one hour before the appointment time
- Full bladder required.

**RENAL ULTRASOUND**

- Drink 1 litre of water.
- Patients should start drinking one and a half hours prior to appointment time.
- Water should be finished one hour before the appointment time
- Full bladder required.

All other ultrasound examinations require NO preparation.