

Ultrasound Scan

What Is An Ultrasound Scan?

An ultrasound scan, also called a sonogram, is a painless imaging method that uses sound waves to create detailed pictures of the inside of your body. Our urologists use ultrasound scans to examine the kidneys, bladder, prostate, and testicles. This helps in diagnosing and monitoring various urological problems and guiding certain procedures.

How Ultrasound Works

A small handheld device called a transducer, is used which emits high-frequency sound waves. These sound waves bounce off different parts of the body, creating “echoes.” The transducer picks up these echoes and converts them into moving images displayed on a monitor.

What Can An Ultrasound Look For?

Our urologists use ultrasound scans as essential tools to diagnose, manage, and monitor treatment progress and outcomes for various urological conditions. Ultrasounds can:

- **Detect abnormalities:** Identify tumours, cysts, and stones.
- **Measure size and location:** Assess the size and location of the kidneys, bladder, prostate, or tumours to help with treatment planning.
- **Guide procedures:** Assist in guiding instruments during a biopsy or other procedures.

Here’s how different types of ultrasounds are used:

Bladder Ultrasound

- **Uses:**
 - Check bladder function and emptying during a urine flow test.
 - Detect bladder stones, tumours, or urethral strictures.
 - Measure the shape and thickness of the bladder wall.

Kidney Ultrasound

- **Uses:**
 - Assess blood flow through the kidneys.
 - Identify blockages, kidney stones, or tumours.

- Measure the size and position of the kidneys.
- Detect congenital anomalies or scarring.
- Detect hydronephrosis (swelling of a kidney due to a urine buildup caused by a blockage).

Prostate Ultrasound (Transrectal Ultrasound - Trus)

Procedure: Involves inserting a probe into the rectum to get detailed images of the prostate gland.

- **Uses:**
 - Check for signs of prostate cancer or an enlarged prostate.
 - Measure the size of the prostate to plan treatment.
 - Guide biopsies to diagnose prostate cancer accurately.

Scrotal Ultrasound

- **Uses:**
 - Evaluate testicular pain or swelling.
 - Detect tumours, cysts, or infections.
 - Assess varicoceles (enlarged veins within the scrotum).
 - Diagnose testicular torsion (twisting of the testicle).

Doppler Ultrasound

- **Assesses:** Blood flow in the vessels of the urinary system.
- **Uses:**
 - Measure the speed and direction of blood flow.
 - Identify blood flow abnormalities in the kidneys or testicles.
 - Detect narrowing or blockages in blood vessels.

What To Expect During An Ultrasound Scan

Ultrasound scans typically take 15 to 45 minutes. Here's what to expect:

Preparation:

You may be asked to:

- **Drink water:** To ensure your bladder is full before a bladder ultrasound scan.
- **Stop eating:** Depending on the type of scan.
- **Wear loose clothing:** For easy access.
- **Drink a special dye or have an injection:** To give clearer and more detailed images.

Procedure:

- **Performed by a doctor, radiographer, or sonographer:** You will lie down on an examination table.
- **Gel application:** A safe, water-based gel is applied to your skin over the area being examined. This gel prevents air pockets that can block sound waves, ensuring clear images. The gel is easy to remove from the skin and clothing if needed.
- **Scanning:** A handheld device called a transducer is moved over your skin to capture images.
 - **External ultrasound:** For kidneys or bladder, a gel is applied to your stomach to ensure good contact between your skin and the probe.
 - **Internal ultrasound:** For prostate exams, a small, lubricated probe is gently inserted into the rectum. This may be uncomfortable but not painful.
 - **Image capture:** Pictures are taken during the procedure.

Procedure Advantages:

- **Painless:** No need for incisions or needles for most ultrasound scans. You may experience mild discomfort if the probe presses down on a full bladder or if it is inserted into your body.
- **Safe:** No exposure to ionising radiation, making it safer than an X-ray or CT scan.
- **Quick and convenient:** Usually completed within 30 minutes.
- **Versatile:** Can assess various organs and structures in the urinary system.
- **Detailed imaging:** Ultrasound can capture images of soft tissues that might not be visible on an X-ray
- **Immediate results:** Patients can often view the procedure in real-time and see images as they are taken.

When Do I Get My Ultrasound Scan Results?

After your ultrasound scan, you can resume normal activities immediately. While ultrasound images are visible in real-time, they still need to be analysed carefully. Our urologists understand the importance of getting answers quickly and will typically schedule a follow-up appointment usually within 3-4 days to discuss the findings with you. Depending on the results, further tests or treatments may be recommended.

What Are The Risks Of An Ultrasound Scan?

- **Low-risk:** Ultrasound uses low-power sound waves rather than radiation, so there are no known risks.
- **Dye injection:** If you receive an injection of dye, you might temporarily feel dizzy, warm, or have a headache.

Why Choose Birmingham Urology Centre For My Ultrasound Scan?

At Birmingham Urology Centre we have a team of leading urologists and oncologists who specialise in diagnosing and treating prostate, bladder, and kidney conditions. Our consultants use ultrasound scans at various stages of a patient's care pathway, from initial diagnosis to ongoing treatment.

Contact us today if you have been advised to have an ultrasound scan or are experiencing symptoms that may require imaging, to book your appointment. Our friendly staff are here to assist you and ensure you receive the best possible care.