



## Pelvic Ultrasound Information

Ultrasound imaging of the pelvis uses sound waves to produce pictures of the structures and organs in the lower abdomen and pelvis. There are three types of pelvic ultrasound: abdominal, vaginal (for women). These exams are frequently used to evaluate the reproductive and urinary systems. Ultrasound is safe, non-invasive and does not use ionizing radiation.

This procedure requires little to no special preparation. You will be asked to drink water prior to the examination to fill your bladder.

Ultrasound involves the use of a small transducer (probe) and ultrasound gel placed directly on the skin. High-frequency sound waves are transmitted from the probe through the gel into the body.

There are two types of pelvic ultrasound:

- abdominal (transabdominal)
- vaginal (transvaginal/endovaginal) for women

In women, a pelvic ultrasound is most often performed to evaluate the:

- uterus
- cervix
- ovaries
- fallopian tubes – usually not visualised if normal
- bladder

A transvaginal ultrasound is usually performed to view the endometrium (the lining of the uterus) and the ovaries. Transvaginal ultrasound also evaluates the myometrium (muscular walls of the uterus).

### **How the procedure is performed:**

#### **Transabdominal:**

For most ultrasound exams, you will be positioned lying face-up on an examination table that can be tilted or moved. Patients may be turned to either side to improve the quality of the images.

After you are positioned on the examination table, the sonographer will apply a warm water-based gel to the area of the body being studied. The gel will help the transducer make secure contact with the body and eliminate air pockets between the transducer and the skin that can block the sound waves from passing into your body. The transducer is placed on the body and moved back and forth over the area of interest until the desired images are captured.

There is usually no discomfort from pressure as the transducer is pressed against the area being examined. However, if scanning is performed over an area of tenderness, you may feel pressure or minor pain from the transducer.

Once the imaging is complete, the clear ultrasound gel will be wiped off your skin. Any portions that are not wiped off will dry quickly. The ultrasound gel does not usually stain or discolour clothing.

## **Transvaginal:**

Transvaginal ultrasound is performed very much like a gynaecologic exam and involves the insertion of the transducer into the vagina after you empty your bladder. The transducer is disinfected before and after each procedure. The tip of the transducer is smaller than the standard speculum used when performing a smear. A protective cover is placed over the transducer, lubricated with a small amount of gel, and then inserted into the vagina. Only two to three inches of the transducer end are inserted into the vagina. The images are obtained from different orientations to get the best views of the uterus and ovaries. Transvaginal ultrasound is usually performed with you lying on your back, possibly with your feet similar to a gynaecologic exam.

Sometimes the sonographer has to apply some pressure whilst the probe is inserted and this is to assess the consistency and structures or sometimes to move bowel out of the line of site and is completely normal.

## **Risks**

- For standard diagnostic ultrasound, there are no known harmful effects on humans.
- That being said it is thought that there maybe a small risk of a heating affect of **prolonged scanning** over tissues in the same area, this is usually only considered of concern in examinations where a fetus is involved which does not apply in this case. However, It is for this reason that all sonographers in all exams generally use a principle called ALARA (As Low As Reasonably Achievable) and so will minimise their scanning time of the same area for prolonged periods of time.
- Please refer to the BMUS (British medical ultrasound society) statement provided in this pack.