



## Ultrasound, Diagnostic

### What is an ultrasound?

Ultrasound scanning is a safe and painless procedure used to look at the organs inside the body. It uses high-frequency sound waves and their echoes to create video pictures of the organs. It is especially useful for soft tissue, such as the kidneys, liver, and uterus. Soft tissue does not show up well on regular X-ray images.

Ultrasound is used to diagnose diseases or conditions. For example, it may be used to look for kidney stones. During pregnancy it can be used to examine an unborn baby, the placenta, the fluid around the baby, and the uterus. Ultrasound is also useful for looking at the heart while it works because it can show the opening and closing of the valves. In addition, it can show how well the heart is pumping.

### How is the test done?

#### Before the test:

Usually no preparation is necessary, unless your healthcare provider gives you special instructions. Some specific tests, such as an ultrasound of the uterus, require a full bladder.

#### During the test:

High-frequency sound waves pass through the body from a small device (called a transducer) that is held against your skin. A gel or oil is usually put on your skin to improve the contact between your skin and the transducer. The transducer is connected to a computer with a display screen. As the sound waves pass through your body, they are reflected by body organs and create echoes. The computer converts these echoes into pictures of the body organs.

Some ultrasound exams are done with a probe put into the rectum or a woman's vagina. For these scans, the transducer is shaped like a narrow tube, covered with a lubricated condom-like sheath and is inserted gently into the rectum or vagina.

A special ultrasound, called Doppler ultrasound, is used to check movement in organs, for example, blood flowing through blood vessels.

#### After the test:

Your healthcare provider will use the results of the ultrasound to plan any additional care you may need. There is no special recovery needed after the scan is done.

### What does the test result mean?

This test is only one part of a larger picture that includes your medical history and current health. Talk to your healthcare provider about your result and any follow up care you may need.

**If your test results are not normal, ask your healthcare provider:**

- If you need additional tests
- If you need treatment. If you do need treatment, ask about your treatment plan