



Education

Ultrasound Scanning

What is ultrasound scanning?

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.

When is it used?

Ultrasound is used to diagnose diseases or conditions such as kidney stones. It is used to examine an unborn baby during pregnancy. Ultrasound is also useful for looking at the heart while it works because it can show the opening and closing of the valves.

How do I prepare for ultrasound scanning?

In general, you do not need to do anything special to prepare for the scan. Some specific tests, such as an ultrasound of the uterus, require a full bladder. If preparations are necessary, your health care provider will give you instructions.

What happens during the procedure?

High-frequency sound waves pass through the body from a small device called a transducer placed on your body. A gel or oil is usually put on the skin to improve the contact between your body and the transducer. The transducer is connected to a computer with a display screen. As the sound waves pass through the body, they are reflected by body organs and create echoes. The computer converts these echoes into images 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 and covered with a lubricated condomlike sheath. The probe 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.

Generally an ultrasound scan takes 15 to 60 minutes to complete.

What happens after the procedure?

Usually you can go home and go back to your normal activities as soon as the scan is done. You may be able to have the results within a few minutes to a few days later.

What are the benefits of this procedure?

- Ultrasound scans help your health care provider to see some of the inside of your body. This helps your provider to diagnose your problem.
 - Ultrasound waves are considered very safe. There are no known side effects, even for pregnant women and children.
 - No medicines are known to interfere with the test results.
 - The scans are fast and painless.
 - The scans do not use radiation.
 - Ultrasound avoids possible hazards of some other tests used for diagnosis (such as bleeding, infection, or reactions to chemicals).
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What are the risks of this procedure?

There are no known risks associated with ultrasound scanning because the sound waves used are not dangerous. However, if it is necessary to use anesthesia or to insert a medical instrument into the body to conduct the ultrasound, there may be a slight risk associated with the procedure.

When should I call my health care provider?

Call your health care provider during office hours if:

- You have questions about the procedure or its result.
- You want to make another appointment.

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