What is Diagnostic Ultrasound?

Because it can be used in the most delicate conditions without major side effects, ultrasound has become one of the most popular diagnostic methods among both patients and physicians. Diagnostic ultrasound allows physicians to diagnose without invading the body with dyes, radiation or exploratory surgery.

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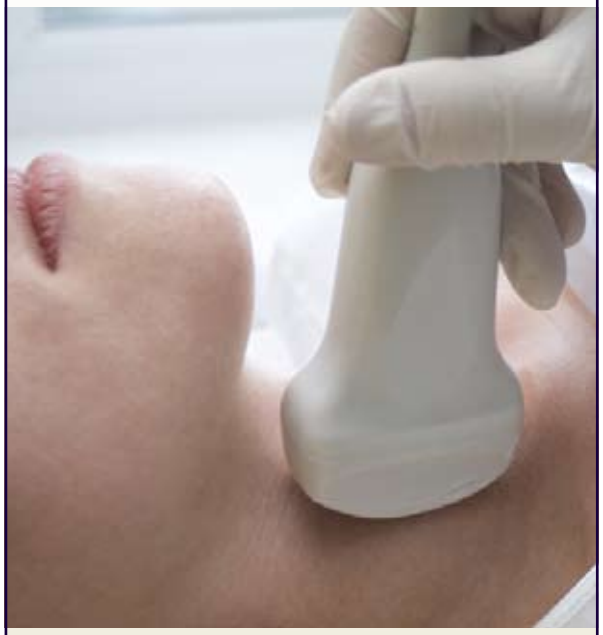
YOUR GUIDE TO

Ultrasound



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Benefits

Ultrasound is one of the most widely used diagnostic procedures available. It provides a safe, non-invasive and virtually painless means of observing soft tissue anatomy on an outpatient basis.

Our ultrasound system generates an advanced level of image quality to help your physician diagnose with confidence. It may provide your doctor all the information needed to recommend a course of action, eliminating the need for other types of more complicated exams or exploratory surgery.

What does the equipment look like?

Ultrasound imaging is based on the same principles involved in the sonar used by bats. During an exam, a sonographer moves a transducer over the part of the body to be imaged. The transducer functions as both a loudspeaker (to create the sounds) and a microphone (to record them). High-frequency sound waves reflect off internal structures (soft tissue, organs and blood flow), producing echoes that

are processed into an image displayed on the ultrasound system monitor. A qualified radiologist will interpret the diagnostic information within the images to help build a diagnosis and suggest a next course of action.

When the examination is complete, the patient may be asked to dress and wait while the ultrasound images are reviewed. Often, the sonographer or radiologist reviews the ultrasound images in real time as they are acquired, and the patient can be released immediately.

How is the procedure performed?

Ultrasound imaging is usually painless and fast. Depending on the type of the exam, you may be instructed to lie down or sit upright on an examination table. The sonographer will apply gel on your skin and press the transducer firmly against your body, moving it until the desired images are captured. The sonographer sees these images on the monitor immediately. Often the patient is able to see them, as well. The examination most often takes less than 30 minutes.

In some situations, your physician may recommend a transvaginal or transrectal ultrasound exam to image closer to the area of interest. In these exams, extremely narrow transducers are inserted into the vagina or rectum. These exams should not create any significant discomfort. In fact, the transvaginal exam may be faster, more accurate and more comfortable overall because you will not be required to have a full bladder.

How should I prepare?

You should wear comfortable, loose fitting clothing for your exam. Other preparation depends on the type of examination you will have. For some scans your doctor may instruct you not to eat or drink for as many as 12 hours before your appointment. For others, you may be asked to drink up to six glasses of water two hours prior to your exam and avoid urinating, so that your bladder is full when the scan begins.

Common uses of the procedure

OB/GYN: Evaluation of fetal anatomy, age, growth and position; imaging of the uterus, bladder and ovaries to evaluate pelvic abnormalities.

Radiology: Identification of pathology in abdominal organs, such as the kidneys, aorta, liver, pancreas, gallbladder and spleen.

Vascular: Examination of vessels, such as the venous system of the legs, to detect and precisely locate any possible blood flow obstructions.

Pediatrics: Detection of congenital conditions of the hips, brain and kidneys.

Risks

There are no known harmful effects for standard diagnostic ultrasound.