



Echocardiogram Examines the Heart with Sound Waves



A safe and painless “echo” uses ultrasound (high-frequency sound waves) and a computer to diagnose heart problems.

During an echocardiogram, a small instrument called a transducer is held against the chest in four different locations. The transducer sends ultrasound waves into the body that bounce off various structures of the heart. The ultrasound machine receives the returning sound waves, and the computer creates a moving image of the heart. The images are displayed on a monitor. They can be recorded on videotape or stored digitally.

Why have an echocardiogram?

It can provide valuable information about the heart, including:

- **The size of the heart chambers** and the thickness of the heart muscle.
- **The heart's pumping strength** or the “squeeze” of the left ventricle (the heart's main pumping chamber).
- **Valve or structural problems** can be seen by echo images. They show the shape and motion of the four valves in the heart and whether a valve is leaking or does not open well enough. Echo images can also help to determine if there is fluid around the heart blood clots or other masses inside the heart chambers, or abnormal holes between heart chambers.

Is it safe?

Very. Ultrasound has been used for more than 30 years, and there are no known risks or side effects. Ultrasound is painless, although there may be some slight discomfort from the pressure of the transducer.

What are the benefits?

This non-invasive test provides information about the structures of the heart and the blood flow through the heart with no risk to the patient.

What are the limitations?

It can be difficult to get quality images of the heart from patients who have broad chest pain, are obese or have lung disease.

How soon will you know the test results?

If the cardiologist is present during the echo test, you may get the results before you leave. Usually patients discuss the results of the exam with their own doctor at a later date.

echocardiogram



In Affiliation with Sacred Heart Medical Center