Woodlands Health
National Healthcare Group

Better Health.
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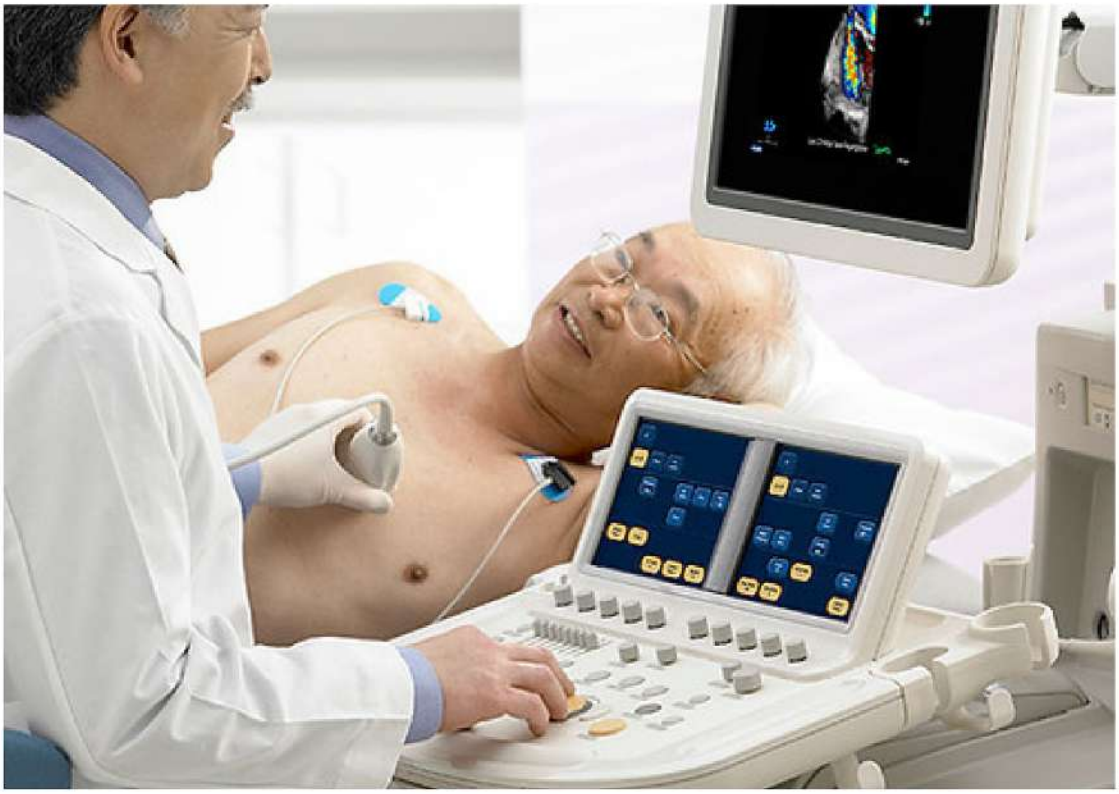
Transthoracic Echocardiography (TTE)

What is Transthoracic Echocardiography (TTE)?

A transthoracic echocardiogram (TTE) looks at the structure and function of the heart. Echocardiography uses ultrasound to scan the moving heart in real time from different directions and records the images on a computer for analysis. Through these images, we can assess if:

- The heart is pumping normally
- The size of the heart is normal
- The four heart valves are working properly
- There are any other structural problems, such as having a hole in the heart



What is the purpose of the TTE test?

The TTE is often used to assess the condition and function of the heart muscle in patients with coronary artery disease, especially after having a heart attack.

It is very useful in identifying the cause of a heart murmur, which is an unusual audible sound of blood flowing through the heart. While a murmur can be harmless, it can also indicate problems in the heart, such as leaky or narrowed heart valves.

What can I expect for the TTE test?

This is an outpatient test performed in the Non-Invasive Cardiac Laboratory and usually takes about 30 to 40 minutes. You will be able to go home after the test.

What are the risks for the TTE test?

Patients with the following conditions may be asked to undergo a TTE to identify the abnormalities that may be causing the following symptoms:

- Chest pain
- Breathlessness
- Heart palpitations
- Fainting spells
- Abnormal Electrocardiograms (ECGs)
- Abnormal heart shadows on chest X-rays

Before the test

To facilitate the procedure, male patients will be asked to remove their shirts. Female patients may be asked to change into special gowns. You will need to lie on your left side during the echocardiogram.

During the test

A water-soluble gel is applied to your chest and the ultrasound probe, a small hand-held equipment, is placed over the gel on your chest to record the best images of the heart muscle. These images will be taken from different areas of the chest to ensure that all parts of the heart can be seen. You will hear "whooshing" noises from time to time, which is one of the ways that the ultrasound machine codes blood flow patterns within the heart for analysis. You may experience some discomfort when the probe is firmly pressed on your chest to get clearer images. Electrocardiogram (ECG) wires will also be attached onto you to monitor the heartbeat and to match the images taken to different parts of each heartbeat.

The room is usually darkened for the TTE test so that pictures can be seen without the glare of external lighting.

Did You Know?

This scan does not allow one to see the heart's blood vessels, but it shows the heart muscles that may have been damaged by a heart attack or other heart conditions.

Contributed by Cardiology & Nursing