

## Common heart tests

### **Electrocardiogram (ECG)**

An ECG is used to identify rhythm and rate disturbances and changes due to angina, lack of blood and oxygen to parts of the heart and heart attack (myocardial infarction), new or old.

Wires will be connected to pads placed on your chest, arms and legs. A reading will be taken that shows the electrical pattern of the heartbeat.

### **Exercise stress test**

An exercise stress test allows doctors to learn how well your heart functions when it is made to work harder. Sometimes heart problems are not apparent at rest and are only brought on by exercise.

The exercise stress test is done while you walk on a treadmill or pedal an exercise bike. A continuous electrocardiogram (ECG) is taken to record your heart's electrical activity. Your blood pressure and pulse will also be monitored. Any symptoms such as chest pain or breathlessness will also be monitored.

Changes in observations and ECG may suggest heart disease.

### **Echocardiogram (ECHO)**

An echocardiogram is a test that provides images of the moving heart, valves and blood flow inside the heart by ultrasound.

An echocardiogram can be done either through the chest wall by moving a probe over the skin on the chest or by inserting a small tube down the throat. The chest wall ECHO is more common.

### **Thallium stress test**

A thallium stress test is a special exercise test that records the flow of blood to the heart muscle during exercise. It can also detect the location or extent of new or old heart attack. A thallium stress test is usually used when an exercise stress test is open to doubt.

A small amount of a radioactive substance called thallium is injected into a vein when you are exercising hard. Thallium is taken up by the muscle cells and is recorded by a special scanning device. Areas of the heart not receiving sufficient oxygen show up as 'cold spots' due to the limited uptake of thallium by the heart muscle cells.

Patients return several hours later for pictures of their heart at rest for comparison.