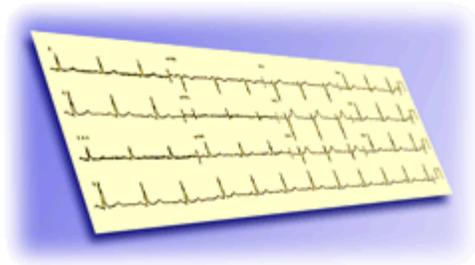


Electrocardiogram (EKG / ECG)

For more information, visit the "Imaging & Diagnosis Section" at Angioplasty.Org (www.angioplasty.org/imaging)
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While not an imaging modality itself, the electrocardiogram (also known as an EKG or ECG) is used in several imaging procedures to monitor heart wave activity or to synchronize the acquisition of data. The "rest electrocardiogram" (an EKG of the patient lying still) is usually one of the first tests given to a patient, especially when the patient is having chest pain or some other symptom.

The test monitors the electrical activity of the heart muscle and can tell if the patient is experiencing a heart attack, or may have had one in the past. An EKG also shows the speed of the heartbeats, as well as whether or not they are regular. Finally the EKG can also reveal any heart defects the patient may have been born with.



typical electrocardiogram



*patient getting
a rest EKG*

Twelve small "sensors" are placed on the patient's chest, arms and legs. These sensors are usually disposable and have one adhesive side. The sensors are snapped onto the electrodes of the EKG unit. The patient lies still to prevent unwanted "noise", a reading is taken and printed out on special graph paper. The whole process, including the application of the sensors, take 5-10 minutes, is completely safe and non-invasive.

While EKGs are not 100% foolproof, they do give the physician a significant amount of data that can guide which tests should be done next.



*EKG sensors come in many
different shapes*

Who Does the Procedure: An electrocardiogram is usually done by a nurse or technician, and is often done right in the doctor's office examining room.

Patient Preparation: No preparation is necessary before getting an EKG, nor is there any risk involved. You should wear a shirt or blouse that allows access to your chest. The nurse may clean your chest with alcohol so the sensors make good contact with your skin. Men may need to have small areas of their chest shaved for the same reason.

*** photo courtesy of Toshiba America Medical Systems*

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