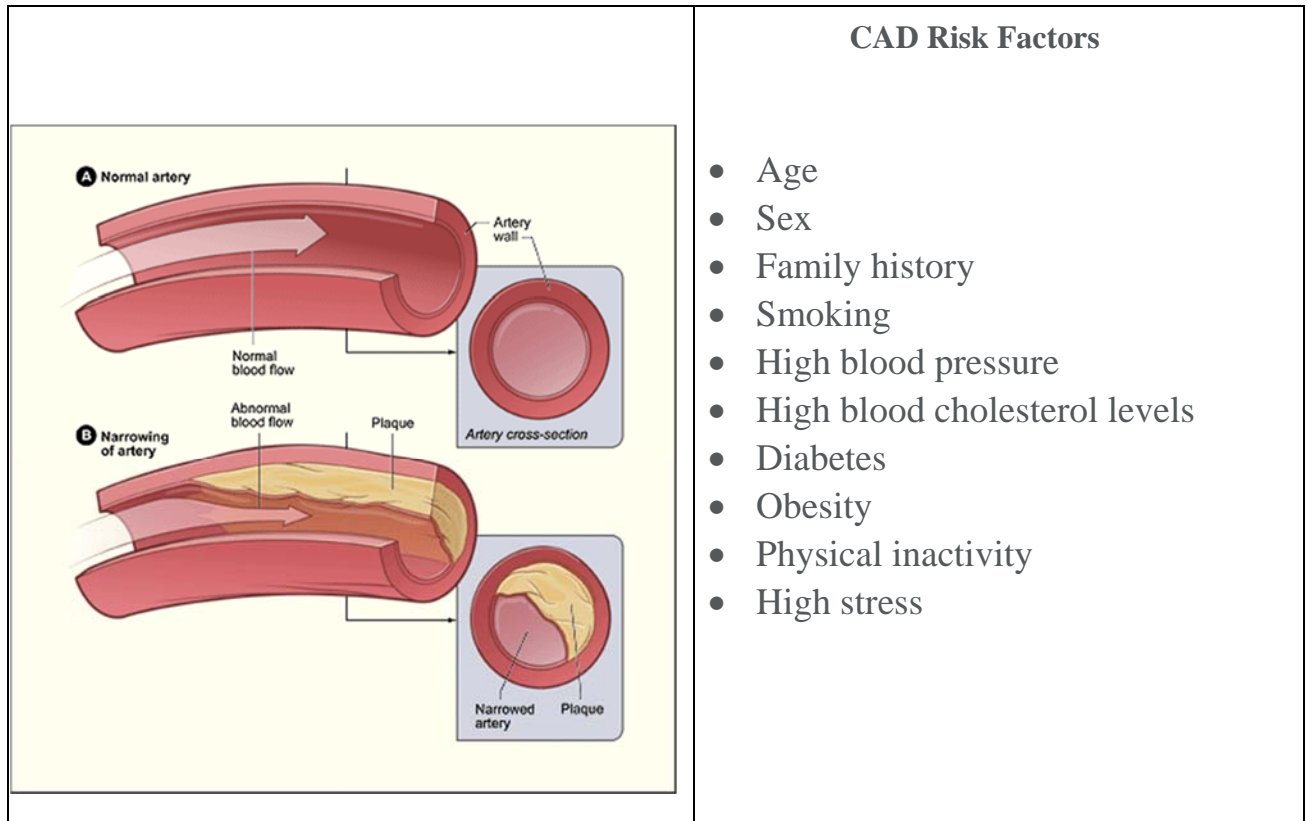


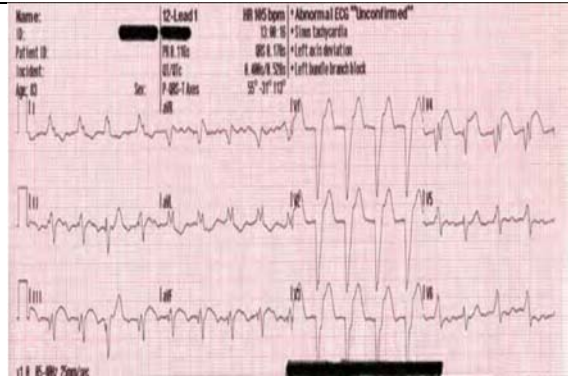
## Coronary Artery Disease

Coronary artery disease, is a condition in which plaque builds up inside the coronary arteries. These arteries supply oxygen-rich blood to your heart muscle. Plaque is made up of fat, cholesterol, calcium, and other substances found in the blood. When plaque builds up in the arteries, the condition is called atherosclerosis. Heart disease is the leading cause of death for both men and women. In 2009, over 616,000 people died of heart disease. More than 2,500 Americans die from heart disease each day, equaling one death every 34 seconds.

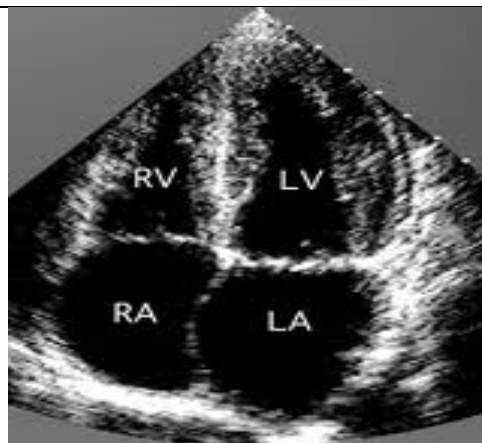


- Several ways to diagnose and treat coronary artery disease exist depending on the patient and the severity of disease.

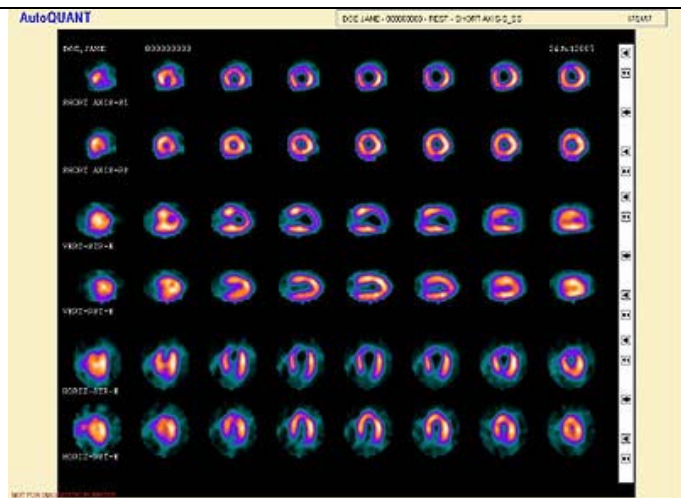
- **Electrocardiogram (ECG).** An electrocardiogram records electrical signals as they travel through your heart. An ECG can often reveal evidence of a previous heart attack or one that's in progress. Certain abnormalities may indicate inadequate blood flow to your heart. This is a screening test and abnormalities often lead to physician recommending further tests.



- **Echocardiogram.** An echocardiogram uses sound waves to produce images of your heart. During an echocardiogram, the physician can determine whether all parts of the heart wall are contributing normally to your heart's pumping activity. Parts that move weakly may have been damaged during a heart attack or be receiving too little oxygen. This may indicate coronary artery disease or other conditions like problems with heart valves.



- **Stress test.** If your signs and symptoms occur most often during exercise or your baseline EKG is abnormal, the physician may ask you to walk on a treadmill or use medicine to simulate exercise and record EKG findings during and then take pictures of the heart either with a nuclear camera or echocardiogram.



- **CT scan.** Computerized tomography (CT) coronary angiogram, can help the physician visualize your arteries. A coronary CTA uses advanced CT technology, along with intravenous (IV) contrast material (dye), to obtain high-resolution, three-dimensional pictures of the moving heart and great vessels.



- **Cardiac catheterization or angiogram.** To view blood flow through your heart, the cardiologist may inject a special dye into your arteries (intravenously). This is known as an angiogram. The dye is injected into the arteries of the heart through a long, thin, flexible tube (catheter) that is threaded through an artery, traditionally in the leg, to the arteries in the heart. Recently a trend towards utilizing the radial artery in the wrist has emerged as the preferred technique. This procedure is called cardiac catheterization. The dye outlines narrow spots and blockages on the X-ray images. If you have a blockage that requires treatment, a balloon can be pushed through the catheter and inflated to improve the blood flow in your coronary arteries. A mesh tube (stent) may then be used to keep the dilated artery open.

