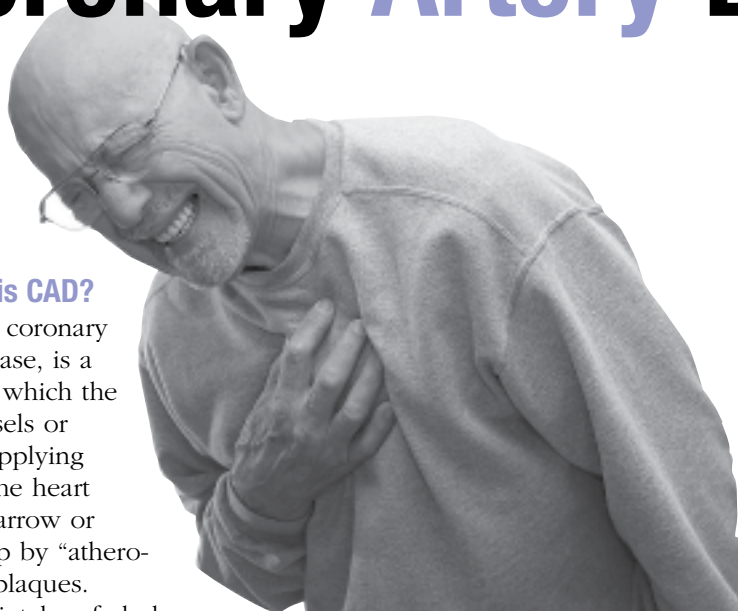


# Coronary Artery Disease



## What is CAD?

CAD, or coronary artery disease, is a disease in which the blood vessels or arteries supplying blood to the heart become narrow or blocked up by “atherosclerotic” plaques.

Excessive intake of cholesterol and saturated fats superimposed on a predisposition due to a patient’s individual risk factors initiate the process of plaque formation. These plaques may remain stable, causing gradual narrowing of the blood vessel and leading to chronic stable angina, which is chest pain caused by lack of blood supply to the heart muscle. The plaques may become unstable and rupture, causing a cascade of events and leading to formation of a clot or thrombus. This may partially or completely block the artery, leading to an acute coronary syndrome, such as unstable angina or acute myocardial infarction (heart attack). Unfortunately more than 20 percent of patients who have a heart attack don’t even make it to the hospital, and many of these patients never had any other symptoms of CAD.

## Who is at risk?

Peak incidence of CAD occurs when men are 50-60 years old and when women are 60-70 years old. In patients who have genetic predisposition or multiple risk factors, it can develop at a much earlier age. Risk factors for CAD are:

- ▼ Family history of CAD
- ▼ High LDL, or “bad” cholesterol
- ▼ Low HDL, or “good” cholesterol
- ▼ High blood pressure
- ▼ Diabetes mellitus
- ▼ Cigarette smoking
- ▼ Sedentary lifestyle

## What are the symptoms of CAD?

CAD may be present without causing any symptoms and show up only on stress testing. The most common symptom of CAD is chest pain precipitated by stress or exertion. Other symptoms include shortness of breath, palpitations and rarely syncope or passing out spells.

## How is CAD diagnosed?

A simple test such as an EKG is useful in the diagnosis of CAD. Other tests include exercise stress EKG, nuclear stress testing and echocardiographic stress testing. Nuclear stress testing is the most sensitive noninvasive test for detection of CAD. The most definitive test for CAD is coro-

nary angiography, which is performed in a cardiac catheterization lab by a cardiologist trained to perform these procedures. On the basis of your symptoms and risk factors, your doctor can recommend the best test for you.

## What are the treatment options?

If CAD presents as acute myocardial infarction or heart attack, it needs immediate emergency care and treatment with angioplasty or clot-busting medicines (thrombolytics). Angioplasty and stenting, if performed in a timely manner, are superior to clot-busting medicines.

If CAD presents as chronic stable

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After earning his medical degree, Dr. Aslam completed Internal Medicine training at University of Illinois. He completed his Cardiology and Interventional Cardiology fellowship at Tulane University in New Orleans. He stayed on faculty of Tulane University Cardiology Section for three years. He is experienced in all aspects of coronary and peripheral vascular interventions. He is board certified in Internal Medicine, Adult Cardiology, Interventional Cardiology and Nuclear Cardiology. He is Fellow of American College of Cardiology and Society for Cardiovascular Angiography and Interventions.



**George Davis, M.D.**  
*Director of Emergency Medicine  
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# Stroke Warning Signs??

**If you notice one or more of these signs, don't wait. Stroke is a medical emergency. Call 9-1-1 or your emergency medical services. Get to a hospital right away!**

The American Stroke Association wants you to learn the warning signs of stroke:

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache with no known cause

## Be prepared for an emergency

- Keep a list of emergency rescue service numbers next to the telephone and in your pocket, wallet or purse.
- Know (in advance) which hospital or medical facility is nearest to your home or office.

## Take action in an emergency

- Not all the warning signs occur in every stroke. Don't ignore signs of stroke, even if they go away!
- Check the time. When did the first warning sign or symptom start? You'll be asked this important question later.
- If you have one or more stroke symptoms that last more than a few minutes, don't delay! Immediately call 9-1-1 or the emergency medical service number so an ambulance (ideally with advanced life support) can quickly be sent for you.
- If you're with someone who may be having stroke symptoms, immediately call 9-1-1 or the EMS. Expect the person to protest — denial is common. Don't take "no" for an answer. Insist on taking prompt action.

**For stroke information, call the American Stroke Association at 1-888-4-STROKE. ■**



## Coronary Artery Disease

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angina, it can be treated as an outpatient procedure in the doctor's office with medications. Some patients whose symptoms persist may require revascularization procedures, which include angioplasty and stents and occasionally coronary artery bypass grafting. Your physician can decide which option is best for you depending on your symptoms, age and results of your initial cardiac testing.

### What are the long-term outcomes of patients with CAD?

The best outcomes are in patients whose disease is diagnosed and treated early. Stress testing may help your physician diagnose early asymptomatic CAD. Most patients can be rendered symptom-free with medical or interventional treatments available. Prognosis in patients who are diagnosed before heart muscle damage, has occurred is excellent. Prognosis declines proportional to amount of heart muscle damage, which usually occurs due to heart attack. This results in reduced pumping ability of the heart, leading to shortness of breath, swelling of feet, fatigue and predisposition to serious arrhythmias.

### What should I do?

- ▼ Be aware of the risk factors of CAD and discuss with your physician if you need a stress test for early detection of CAD.
- ▼ Maintain a healthy lifestyle by eating a low-fat, low-cholesterol diet, avoid smoking and take daily exercise.
- ▼ If you have high blood pressure, diabetes mellitus or high cholesterol, keep these under control by regularly taking the medications your doctor prescribes for these conditions.
- ▼ If you experience symptoms of CAD, especially chest pain get help immediately.

**For a Physician Referral line, call 281.401.7777. ■**