



Fact Sheet

Coronary Artery Disease (CAD)

Key Facts

- Coronary artery disease (CAD) occurs when arteries that supply blood to the heart become narrowed or blocked
- In the United States, CAD is the most common type of heart disease and the leading cause of death for men and women¹



Overview

Coronary artery disease occurs when the arteries that supply blood to the heart become narrowed or blocked by a buildup of "plaque" – cholesterol or other fatty deposits that build on the inner wall of the artery. Over time, this plaque build up results in a reduction of blood flow to the heart, which can cause chest pain. If the artery becomes completely blocked, usually by a blood clot, oxygen is prevented from reaching the heart which can result in a heart attack and/or damage to the heart tissue.

Signs and Symptoms

Two common signs of CAD are chest pain and shortness of breath. Both are caused by the reduction of blood flow to the heart muscle. If the reduction of blood flow is mild, there may be no noticeable symptoms at rest. However, symptoms such as heaviness in the chest may occur with activity or stress. Other symptoms include: pain in the jaw, pain in the arms, heartburn, nausea, vomiting and heavy sweating. Women may be more likely to exhibit "atypical" symptoms and often experience no pain. To diagnose CAD, a physician will assess symptoms and risk factors and may administer a physical exam or other diagnostic tests and procedures.

Risk Factors

In general, a person's chance of developing CAD increases when there are more risk factors present. Some factors which can be treated or controlled through diet, exercise and lifestyle changes include: high cholesterol, high blood pressure, obesity, smoking and diabetes. Other factors, including increasing age, gender and family history,

¹ Coronary Artery Disease. National Heart, Lung and Blood Institute. November 2007
Available at: http://www.nhlbi.nih.gov/health/dci/Diseases/Cad/CAD_WhatIs.html

cannot be controlled. In general, men are at greater risk for CAD, however, the risk for women increases after menopause.

Treatments

New treatment options and earlier diagnoses are helping to decrease the death rate from CAD. When determining the best treatment, factors such as age, lifestyle and pre-existing medical conditions are all considered. Potential treatments include lifestyle changes, medications and medical procedures such as coronary artery bypass graft surgery or the less-invasive angioplasty with or without the insertion of a stent.

In cases where a stent is appropriate, an interventional cardiologist will determine whether to use a bare metal or drug eluting stent. A bare metal stent acts as a scaffolding to prop open an artery at the site of blockage and restore blood flow to the heart. A drug eluting stent works in a similar way, but also releases a medication in a controlled manner over time to help prevent the artery from becoming blocked again following the stent procedure.

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