



BASIC INFORMATION

DESCRIPTION

An extremely common form of hardening of the arteries in which plaque deposits form in the walls of the blood vessels that carry oxygen and other nutrients from the heart to other body parts. Atherosclerosis may lead to kidney damage, decreased circulation to the brain and extremities, and coronary-artery disease. Atherosclerosis is a major cause of strokes and heart attacks. Onset can be in the 30's, but up to age 45, atherosclerosis is more common in men. After menopause, women have the same incidence.

FREQUENT SIGNS AND SYMPTOMS

- Symptoms often are absent until atherosclerosis reaches advanced stages. Symptoms depend on what part of the body has a decreased blood flow and the extent of disease.
- Muscle cramps if atherosclerosis involves vessels in the legs.
- Angina pectoris or heart attack if it involves blood vessels to the heart.
- Stroke or transient ischemic attack if it involves vessels to the neck and brain.

CAUSES

Patches of fatty tissue, composed of low density lipoprotein that damage artery walls often collect at artery junctions. This collection may begin in early adulthood. At these points, the inner lining of the artery may trap fatty substances that circulate in the blood. As fatty deposits accumulate, they reduce the blood vessel's elasticity and narrow the passageway, interfering with blood flow. They can also crack or tear and form clots that block off the artery.

RISK INCREASES WITH

- High blood pressure.
- High cholesterol levels (high levels of the low density lipoprotein and low levels of the high density lipoprotein).
- Adults over 60.
- Male sex.
- Stress.
- Diabetes mellitus.
- Obesity; sedentary lifestyle.
- Smoking.
- Poor nutrition (too much fat and cholesterol in the diet).
- Family history of atherosclerosis.

PREVENTIVE MEASURES

- Don't smoke.
- Follow suggestions under Diet. Children and young adults of parents with this condition may benefit from a low-fat diet.
- Exercise regularly.
- Reduce stress to a manageable level when possible.
- If you have diabetes or high blood pressure, adhere strictly to your treatment program.

EXPECTED OUTCOMES

- This condition is currently considered incurable. However, numerous reports now indicate that vigorous treatment of risk factors can reverse some blockage. Complications are eventually fatal without treatment.
- Scientific research into causes and treatment continues.

POSSIBLE COMPLICATIONS

- Heart attack.
- Stroke.
- Angina pectoris.
- Kidney disease.
- Congestive heart failure.
- Heartbeat irregularity problems.
- Sudden death.



TREATMENT

GENERAL MEASURES

- Diagnostic tests may include laboratory studies, ECG (electrocardiograph that measures electrical activity of the heart), exercise-tolerance test, blood studies of cholesterol and high-density lipoproteins, blood sugar tests, and X-rays of the chest and blood vessels.
- Treatment for atherosclerosis is generally directed at its complications.
- Counseling to learn to cope with stress is sometimes helpful.
- Stop smoking.
- Surgical treatment is available in some high-risk patients. Balloon angioplasty can open narrowed vessels; vein graft bypass can help restore blood to the heart; large arterial obstructions can be removed by endarterectomy; entire segments of diseased vessels can be replaced by woven plastic tube grafts.
- Additional information available from the American Heart Association, local branch listed in telephone directory, or call (800) 242-8721.

MEDICATIONS

- Since the damage has already been done, there is no satisfactory medicine that can treat atherosclerosis.
- Recent studies show that lowering cholesterol levels in persons with high levels can increase life expectancy. If you have symptoms of a disorder caused by atherosclerosis and diet and exercise fail to reduce cholesterol, antihyperlipidemic drugs may be prescribed.
- Other drugs may be necessary to treat symptoms of an associated problem (high blood pressure, heartbeat irregularities).
- Some studies have indicated that aspirin and vitamin E may reduce the risk of heart attack. Get medical advice to see if they should be recommended for you.

ACTIVITY

- Usually no restrictions. Activity will depend on general state of health and any other illnesses present.
- A routine exercise program is encouraged.

DIET

Eat a diet that is low in fat and low in salt and high in fiber. Increase your intake of grains, fresh fruits and vegetables.



NOTIFY OUR OFFICE IF

You or a family member has high risk factors for atherosclerosis and want to become involved in a prevention program.