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Arteriosclerosis and atherosclerosis are sometimes used to mean the same thing, but there's a difference between the two terms.

Arteriosclerosis occurs when the blood vessels that carry oxygen and nutrients from your heart to the rest of your body (arteries) become thick and stiff — sometimes restricting blood flow to your organs and tissues. Healthy arteries are flexible and elastic, but over time, the walls in your arteries can harden, a condition commonly called hardening of the arteries.

Atherosclerosis is a specific type of arteriosclerosis.

Atherosclerosis is the buildup of fats, cholesterol and other substances in and on your artery walls. This buildup is called plaque. The plaque can cause your arteries to narrow, blocking blood flow. The plaque can also burst, leading to a blood clot.

Although atherosclerosis is often considered a heart problem, it can affect arteries anywhere in your body. Atherosclerosis can be treated. Healthy lifestyle habits can help prevent atherosclerosis.

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Symptoms

Mild atherosclerosis usually doesn't have any symptoms.

You usually won't have atherosclerosis symptoms until an artery is so narrowed or clogged that it can't supply enough blood to your organs and tissues. Sometimes a blood clot completely blocks blood flow, or even breaks apart and can trigger a heart attack or stroke.

Symptoms of moderate to severe atherosclerosis depend on which arteries are affected. For example:

- **If you have atherosclerosis in your heart arteries**, you may have symptoms, such as chest pain or pressure (angina).
- **If you have atherosclerosis in the arteries leading to your brain**, you may have signs and symptoms such as sudden numbness or weakness in your arms or legs, difficulty speaking or slurred speech, temporary loss of vision in one eye, or drooping muscles in your face. These signal a transient ischemic attack (TIA), which, if left untreated, may progress to a stroke.
- **If you have atherosclerosis in the arteries in your arms and legs**, you may have signs or symptoms of peripheral artery disease, such as leg pain when walking (claudication) or decreased blood pressure in an affected limb.
- **If you have atherosclerosis in the arteries leading to your kidneys**, you develop high blood pressure or kidney failure.

When to see a doctor

If you think you have atherosclerosis, talk to your doctor. Also pay attention to early symptoms of inadequate blood flow, such as chest pain (angina), leg pain or numbness.

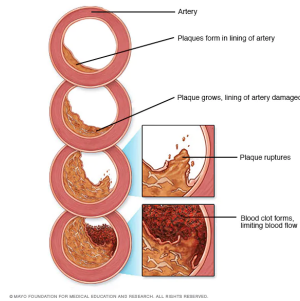
Early diagnosis and treatment can stop atherosclerosis from worsening and prevent a heart attack, stroke or another medical emergency.

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Causes

Atherosclerosis is a slow, progressive disease that may begin as early as childhood. Although the exact cause is unknown, atherosclerosis may start with damage or injury to the inner layer of an artery. The damage may be caused by:

- High blood pressure
- High cholesterol
- High triglycerides, a type of fat (lipid) in your blood
- Smoking and other sources of tobacco
- Insulin resistance, obesity or diabetes
- Inflammation from an unknown cause or from diseases such as arthritis, lupus, psoriasis or inflammatory bowel disease



Development of atherosclerosis

Once the inner wall of an artery is damaged, blood cells and other substances often clump at the injury site and build up in the inner lining of the artery.

Over time, fatty deposits (plaque) made of cholesterol and other cellular products also build up at the injury site and harden, narrowing your arteries. The organs and tissues connected to the blocked arteries then don't receive enough blood to function properly.

Eventually, pieces of the fatty deposits may break off and enter your bloodstream.

In addition, the smooth lining of the plaque may rupture, spilling cholesterol and other substances into your bloodstream. This may cause a blood clot, which can block the blood flow to a specific part of your body, such as occurs when blocked blood flow to your heart causes a heart attack. A blood clot can also travel to other parts of your body, blocking flow to another organ.

Risk factors

Hardening of the arteries occurs over time. Besides aging, factors that may increase your risk of atherosclerosis include:

- High blood pressure

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- High cholesterol
 - High levels of C-reactive protein (CRP), a marker of inflammation
 - Diabetes
 - Obesity
 - Sleep apnea
 - Smoking and other tobacco use
 - A family history of early heart disease
 - Lack of exercise
 - An unhealthy diet

Complications

The complications of atherosclerosis depend on which arteries are blocked. For example:

- **Coronary artery disease.** When atherosclerosis narrows the arteries close to your heart, you may develop coronary artery disease, which can cause chest pain (angina), a heart attack or heart failure.
- **Carotid artery disease.** When atherosclerosis narrows the arteries close to your brain, you may develop carotid artery disease, which can cause a transient ischemic attack (TIA) or stroke.
- **Peripheral artery disease.** When atherosclerosis narrows the arteries in your arms or legs, you may develop circulation problems in your arms and legs called peripheral artery disease. This can make you less sensitive to heat and cold, increasing your risk of burns or frostbite. In rare cases, poor circulation in your arms or legs can cause tissue death (gangrene).
- **Aneurysms.** Atherosclerosis can also cause aneurysms, a serious complication that can occur anywhere in your body. An aneurysm is a bulge in the wall of your artery.

Most people with aneurysms have no symptoms. Pain and throbbing in the area of an aneurysm may occur and is a medical emergency.

If an aneurysm bursts, you may face life-threatening internal bleeding. Although this is usually a sudden, catastrophic event, a slow leak is possible. If a blood clot within an aneurysm dislodges, it may block an artery at some distant point.

- **Chronic kidney disease.** Atherosclerosis can cause the arteries leading to your kidneys to narrow, preventing oxygenated blood from reaching them. Over time, this can affect your kidney function, keeping waste from exiting your body.

Prevention

The same healthy lifestyle changes recommended to treat atherosclerosis also help prevent it. These include:

- Quitting smoking
- Eating healthy foods
- Exercising regularly
- Maintaining a healthy weight
- Checking and maintaining a healthy blood pressure
- Checking and maintaining healthy cholesterol and blood sugar levels

Just remember to make changes one step at a time, and keep in mind what lifestyle changes are manageable for you in the long run.

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