

Causes and Complications of Atherosclerosis

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ABOUT THE STUDY

Plaque forms inside the arteries as a result of atherosclerosis. Plaque is made up of fat, cholesterol, calcium, and other blood-borne chemicals. Plaque forms with time, narrowing the arteries. This prevents oxygen-rich blood from reaching the organs and other parts of the body. Atherosclerosis can lead to serious complications such as heart failure, stroke, or even death.

Atherosclerosis is the thickening or setting of the passageways caused by an increase in plaque in the stockpile course's interior coating. Raised cholesterol and fatty substance levels, hypertension, smoking, diabetes, beefiness, dynamic job, and consuming saturated fats are all risk factors.

Causes

Atherosclerosis is a slow-moving, reforming disease that can begin as early as puberty. Although the exact cause is unknown, atherosclerosis may begin with damage or injury to a conduit's interior layer. The following factors might cause harm:

- Hypertension
- High cholesterol
- High fatty substances, a kind of fat (lipid) in the blood
- Smoking and other tobacco products
- Insulin resistance, weight, or diabetes
- Irritation from an unknown cause or diseases such as joint discomfort, lupus, psoriasis, or fiery intestinal illness

When the inner mass of a vein is damaged, platelets and other substances tend to congregate near the injury site and form in the vein's interior covering. At the injured site, greasy stores (plaque) consisting of cholesterol and other cell components form and harden over time, restricting the veins. The organs and tissues connected with the obstructed conduits subsequently don't obtain enough blood to function properly.

Bits of oily stores may eventually sever and enter the circulatory system. Furthermore, the plaque's smooth surface may split, spewing cholesterol and other chemicals into the circulatory system. This can produce blood coagulation, which can block blood flow to a specific portion of the body. For example,

coronary failure is caused by an obstructed blood flow to the heart. Blood coagulation can also spread to other parts of the body, obstructing blood flow to other organs.

Risk factors

The hardening of the arteries occurs over time. Aside from age, the following variables may increase the risk of atherosclerosis:

- Hypertension
- Elevated cholesterol
- Unmistakable levels of C-Reactive Protein (CRP), a sign of aggravation
- Diabetes
- Obesity
- Sleep apnea
- Smoking and other tobacco use
- A family history of early coronary artery disease
- Lack of movement
- An unfavorable dietary pattern

Complications

The hardening of the arteries occurs over time. Aside from age, the following variables may increase the risk of atherosclerosis:

Coronary supply route illness: When atherosclerosis narrows the veins surrounding the heart, the risk developing coronary artery disease, which can result in chest pain (angina), cardiovascular failure, or cardiovascular collapse.

Carotid conduit infection: When atherosclerosis restricts the blood vessels near the brain, the risk developing a carotid conduit infection, which can result in a TIA or stroke.

Illness on the periphery of the supply chain when atherosclerosis restricts the supply channels in the arms or legs, he/she may get fringe corridor illness, which causes flow problems in the arms and legs. This can make person less sensitive to heat and cold, increasing the risk of frostbite or consumes. Tissue passing might occur in rare circumstances when person have a helpless channel in his/her arms or legs.

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Aneurysms

Atherosclerosis can also lead to aneurysms, which are serious complications that can occur anywhere in the body. An aneurysm is a bulge in person vein's bulk.

The arteries leading to person kidneys might constrict due to atherosclerosis, preventing oxygenated blood from reaching them. This can impair kidney function over time, preventing waste from leaving his/her body.