

# Arteriosclerosis

#### **Overview**:

- It refers to the buildup of fats, cholesterol, and other substances in the arteries, which can restrict blood flow.
- Arteriosclerosis often leads to serious heart problems; it can also affect arteries anywhere in your body.
- The risk of arteriosclerosis can be lowered by managing some of the following risk factors: family history, obesity, diabetes, high blood pressure, smoking, and foods rich in saturated fats.
- Early diagnosis and treatment can stop arteriosclerosis from worsening.
- Lifestyle changes are often the most appropriate treatment and prevention method recommended for arteriosclerosis.

#### Introduction:

Arteries are blood vessels that carry oxygen-rich blood to your heart and other parts of your body. The term arteriosclerosis refers to the buildup of oxidized fatty substances and plaque on the arterial walls, restricting blood flow to the body's organs. Arteriosclerosis can affect arteries anywhere in the body, including the heart, brain, arms, legs, pelvis, and kidneys. Depending on which arteries are blocked, arteriosclerosis can lead to several diseases, such as:

- Coronary artery disease.
- Heart attack.
- Carotid artery disease.
- Peripheral artery disease.
- Chronic kidney disease.

It can also leads to serious problems or even death.



#### Cause:

Arteriosclerosis is caused by the buildup of fats, cholesterol, and other substances in the arteries. However, it is still unknown exactly how it begins or what causes it. Arteriosclerosis is a slow, progressive vascular disease that may start as early as childhood and then progress more rapidly with age.

#### **Risk Factors**:

- Advanced age.
- Family history of early heart disease.
- High blood cholesterol.
- Inactivity.
- An unhealthy diet.
- Insulin resistance.
- High blood pressure.
- Diabetes.
- Excess body weight or obesity.
- Smoking.

#### Symptoms:

Usually, patients with arteriosclerosis won't exhibit any symptoms until an artery is so narrowed or clogged that it can't supply adequate blood to the body's organs. Symptoms of arteriosclerosis depend on which arteries are affected. For example:

- Arteriosclerosis in the arteries of the heart. The symptoms include: chest pain or pressure (angina).
- Arteriosclerosis in the arteries leading to the brain. The symptoms include: sudden numbness or weakness in the arms or legs, difficulty speaking or slurred speech, temporary loss of vision in one eye, or



drooping muscles in the face. These symptoms signal a transient ischemic attack (TIA), which, if left untreated, may progress to a stroke.

- Arteriosclerosis in the arteries of the arms and legs (Peripheral artery disease). The symptoms include: leg pain when walking.
- Arteriosclerosis in the arteries leading to the kidneys: it can lead to high blood pressure or kidney failure.

#### When to See a Doctor:

- Consult your doctor if you have a family history of any type of arteriosclerosis.
- Also, pay attention to early symptoms of inadequate blood flow to certain areas of the body (such as: chest pain (angina), leg pain, or numbness).
- Shortness of breath during routine day-to-day activities.

#### **Complications**:

- Coronary artery disease, which can cause chest pain, a heart attack, or heart failure.
- Carotid artery disease, which can cause a transient ischemic attack (TIA) or a stroke.
- Peripheral artery disease, which can cause tissue death (gangrene).
- Aneurysms, which can occur anywhere in your body.
- Chronic kidney disease.

#### **Diagnosis**:

Early diagnosis and treatment can stop arteriosclerosis from worsening and prevent a heart attack, a stroke, or another medical emergency. The diagnosis depends on:

• Medical history.



- Family history.
- Laboratory tests: blood tests:
- Other imaging tests: ultrasound, electrocardiogram (ECG), CT scan, and MRI scan.

### Treatment:

The recommended treatment for arteriosclerosis is making lifestyle changes and leading a healthy life. Sometimes, medication or surgical procedures may be recommended as well.

## **Prevention**:

You may be able to prevent or delay the progression of arteriosclerosis and its related diseases by making some lifestyle changes and getting regular care, which can allow you to avoid diseases and live a long healthy life. These lifestyle changes include:

- Adopting heart-healthy eating habits and avoiding foods that are high in sodium, added sugar, solid fats, and refined grains.
- Engaging in physical activity.
- Avoiding smoking.
- Managing your weight.
- It is also important to undergo laboratory tests upon reaching the following ages:
  - For men: 35 years or older, and if there are any risk factors, then 20-35 years.
  - For women: 45 years or older, and if there are any risk factors, then 20-45 years.

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