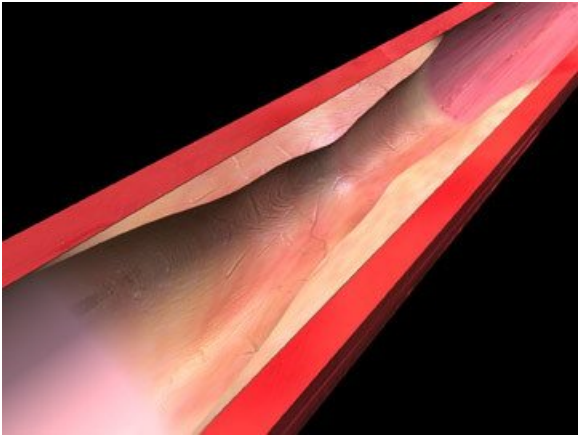


Atherosclerosis



Atherosclerosis is a disease that affects the arteries of the body. The term "atherosclerosis" refers to the accumulation of fatty substances on the artery walls. This is called plaque. Plaque forms when the internal lining of the artery, which we call the endothelium, is damaged. This damage allows cholesterol and other fatty substances in the blood to be deposited on the artery wall. Over time, these deposits thicken the artery walls

and cause the opening of the artery, called the lumen, to become narrower. If the plaques become large enough, they can block the flow of blood to the part of the body where that artery takes blood. Plaque is generally fragile and is at risk of detaching or breaking. When this happens, a blood clot can form, which in turn can block the flow of blood through the artery. If the artery takes blood to the heart muscle, then a heart attack is caused by the formation of the clot. If the artery takes blood to a part of the brain, then a stroke is caused by the formation of the clot. Atherosclerosis tends to be a disease that progresses slowly and can even begin in childhood and progress throughout life. In some people with risk factors for atherosclerosis, the disease can progress more rapidly. These risk factors are believed to cause damage to the artery wall.

Being male and having a family history of premature cardiovascular disease increases the risk of atherosclerosis. These risk factors cannot be modified or treated. Other risk factors can be treated. These include hypertension (high blood pressure), high cholesterol, smoking, diabetes, obesity and a sedentary lifestyle. Research shows that treating these modifiable risk factors, patients can significantly lower their risk of heart attack and stroke.

Your doctor may instruct you to do exercise regularly, modify your diet and certain habits in order to lower the risk factors. If lifestyle changes do not improve the risk factors, your doctor may choose to prescribe you medications to lower blood cholesterol, reduce blood pressure and control diabetes. Patients who smoke must stop. Ask the doctor for help if you do not succeed in quitting smoking.