

*Oyih on Sat A.***ATHEROSCLEROSIS-CAUSES, PROCESS OF ITS DEVELOPMENT
AND TREATMENT*****Tutor: PhD, professor Trushel N.A.****Department of Normal Anatomy**Belarussian State Medical University, Minsk*

Atherosclerosis is a disease of the arterial vasculature that is characterized by the disrupted balance and abnormal accumulation of lipids, inflammatory cells, matrix deposits and smooth muscle proliferation in the wall of medium and large caliber arteries. This accumulation is most commonly detected during the second decade of life and develops further with age.

The implication of aging and early development of atherosclerotic lesions makes a significant difference between chronic and acute plaque which will be describe in disease pathophysiology. The progression of vascular lesions results in the reduction or cessation of blood flow through the vessel to the dependent tissues.

Recent years have brought a significant amount of new results in the field of atherosclerosis. A better understanding of the role of different lipoprotein particles in the formation of atherosclerotic plaques is now possible. Atherosclerosis results from an initial injury to the artery endothelium caused by mechanical and environmental factors, resulting in an inflammatory response in the vessel wall. Inflammation has a crucial role in pathogenesis of atherosclerosis. The disease is accompanied by excessive fibrosis of intima, fatty plaques formation, proliferation of smooth muscle cells and migration of a group of cells such as monocytes, and platelets which are formed in response to inflammation. A systematic review of the following literature was performed. Atherosclerosis by Peter W.E Wilson. Lipids and Atherosclerosis by Chris J, Packard and Daniel J Rader. In this review, I provided a background consisting of the current understanding of the current understanding of the pathophysiology and treatment of atherosclerotic disease, followed by future perspectives on several novel drugs that target atherosclerosis.