4-PIECE ARTERY

Normal

Lumen
Tunica intima (endothelium)
Tunica media (smooth muscle)
Tunica externa (adventitia) loosely packed collagen and elastic fibers.

Fatty Streak

Lipids (cholesterol triglycerides) are deposited in the artery lining forming fatty streaks.

Atheroma

Atheroma

Atheroma formation is a build up of lipids that narrow the artery lumen and can reduce the blood flow.

Fibrous Plaque and Blockage

As fibers grow within the fatty layers, the atheroma begins to harden, forming plaque. Blood flow is severely reduced as the lumen narrows. Complete blockage occurs as a blood clot fills the lumen space.

The model shows atherosclerosis. Fatty substances are gradually deposited inside the artery walls that narrow the lumen and reduce bloodflow.