MG35513 | 4 STAGES OF ARTERIOSCLEROSIS, 4 PARTS

Nasco HEALTHCARE

Nasco
HEALTHCARE

This anatomical model presents a cross-section of an artery in 4 stages of arteriosclerosis, demonstrating the progression of the disease from a normal artery to a complete arterial blockage. The model is mounted on a base and allows visualization of different stages of atherosclerosis, including fatty streak, fibrous plaque, and the development of a blood clot.

Applications:

Ideal for teaching and research in anatomy and physiology, medical training, demonstrations in medical offices, and aid in the study of vascular pathologies. Allows visualization and understanding of the progression of arteriosclerosis and its consequences.

Technical Advantages:

* Detailed representation of the 4 stages of arteriosclerosis.
* High-precision natural molding.
* Manufactured from stable synthetic material and resin approved in toxicological tests.
* Original replicas, hand-painted, with precise references and markings.
* Includes an information card with related structures.
* Enlarged model compared to natural size (scale indicated in technical specifications).
* Polymer base with support and metal rod.

3D Technology and Augmented Reality:

Our anatomical models offer a visual complement through information cards that activate 3D models viewable in augmented reality (AR). This interactive platform aids learning, allowing comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

* Material: Resin and polymer.
* Scale: [Insert numerical scale here, ex: 2:1]
* Painting: Manual.

Main Structures:

normal artery: A normal artery has three main layers: the tunica intima (inner), the tunica media (middle), and the tunica adventitia (outer). The normal artery presents a wide lumen and elastic walls, allowing blood flow.

tunica intima (endothelium): Innermost layer of the artery, composed of endothelial cells that form a smooth surface that facilitates blood flow. Its integrity is crucial for vascular health.

tunica media (smooth muscle): Intermediate layer, rich in smooth muscle cells and elastic fibers, responsible for regulating arterial diameter and, consequently, blood pressure.

tunica externa (adventitia): Outermost layer, composed of connective tissue, which provides structural support and contains blood vessels (vasa vasorum) and nerves that irrigate and innervate the arterial wall itself.

lipids (cholesterol triglycerides): Lipids, including cholesterol and triglycerides, that can accumulate in the arterial wall, contributing to the development of atherosclerotic plaques.

atheroma: Mass of lipids, inflammatory cells, and connective tissue that accumulates in the artery wall, characterizing atherosclerosis.

plaque: Accumulation of atheroma in the arterial wall, which can cause narrowing of the lumen and partial or total obstruction of blood flow.

blood clot: Solid mass formed from blood elements (platelets and fibrin) that can completely obstruct blood flow in the affected artery, leading to ischemic events.

fatty streak: Initial stage of atherosclerosis, characterized by the accumulation of lipids in the tunica intima of the artery, forming yellowish streaks.

arterial blockage: Complete obstruction of the arterial lumen, usually caused by the formation of a large atherosclerotic plaque or by a blood clot, leading to interruption of blood flow.

About the Anatomical Models:

They are developed with resin replication technology, supplying the demand for anatomical models for teaching and research. They present the essential morphological characteristics with excellent cost-benefit, good resistance, manual painting, and numbering for precise identification of structures.

Acquire your anatomical model and provide a learning experience in your institution. Contact us to

List of all visible structures:

- normal artery
- tunica intima (endothelium)
- tunica media (smooth muscle)
- tunica externa (adventitia)
- lipids (cholesterol triglycerides)
- atheroma
- plaque
- blood clot
- fatty streak
- arterial blockage