MG29729 | ARTERIOSCLEROSIS AND THROMBOSIS WITH CROSS SECTION OF ARTERY

A detailed study of the pathological phases of arteriosclerosis, including the formation of atheroma plaques and the occurrence of thrombosis. This model, in enlarged scale, presents a cross-section of an artery, allowing clear visualization of the different structures involved in the process. Mounted on a polymer base with a metal support and rod, it facilitates handling and observation.

Applications:

Ideal for the study of anatomy in schools and universities; surgical dissection training; patient education and demonstration of procedures; medical and scientific information; study of the circulatory system and general anatomical study.

Technical Advantages:

* Detailed representation of the phases of arteriosclerosis and thrombosis;
* High-precision natural molding;
* Manufactured from stable and resistant synthetic material;
* Original replicas;
* 10 times natural size;
* Numbered and hand-painted;

* Includes an information card with related structures;
* Resin approved in toxicological tests.

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:

* Scale: 10 times natural size
* Material: Synthetic resin

Main Structures:

Thrombosis: Thrombosis represents the formation of a thrombus, a blood clot, within a blood vessel, obstructing blood flow. This clot may be composed of platelets, fibrin, and blood cells, and its formation is frequently associated with vascular wall lesions, changes in blood flow, or coagulation disorders.

Atherosclerosis Plaque: The atherosclerosis plaque is a complex formation that develops in the inner wall of the arteries. It is composed of lipids (cholesterol, triglycerides), inflammatory cells, fibrous tissue, and calcium. The accumulation of these substances leads to thickening and hardening of the arterial wall, reducing the lumen and increasing the risk of cardiovascular events.

Normal: Represents the structure of a healthy artery, with a smooth and elastic wall, allowing free and unobstructed blood flow. The intima (endothelium) is intact and plays a crucial role in maintaining vascular homeostasis.

Fat Streak: Refers to the accumulation of lipids, mainly cholesterol, in the intima of the artery. This initial accumulation is one of the first steps in the development of atherosclerosis.

Atheroma: Is a mature atherosclerotic plaque, characterized by a central lipid core (rich in cholesterol and cholesterol esters) surrounded by a fibrous cap. Its presence causes a significant narrowing of the arterial lumen, potentially leading to ischemia of the tissues irrigated by the affected artery.

Fibrous Plaque: Is the fibrous layer covering the lipid core of the atheroma. It is composed mainly of smooth muscle cells, collagen, and other extracellular matrix proteins. The stability of the fibrous plaque is crucial to prevent rupture and consequent thrombosis.

Other structures can be verified directly on the physical piece or on the interactive 3D model.

About the Anatomical Models:

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

List of all visible structures:

- Thrombosis
- Atherosclerotic plaque
- Normal
- Fatty streak
- Atheroma
- Fibrous plaque