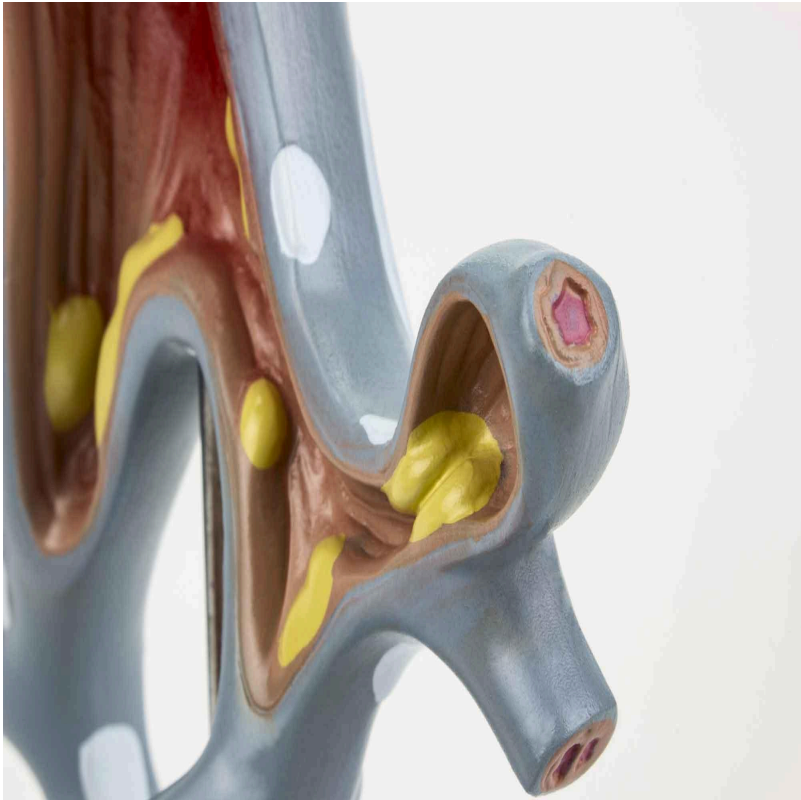




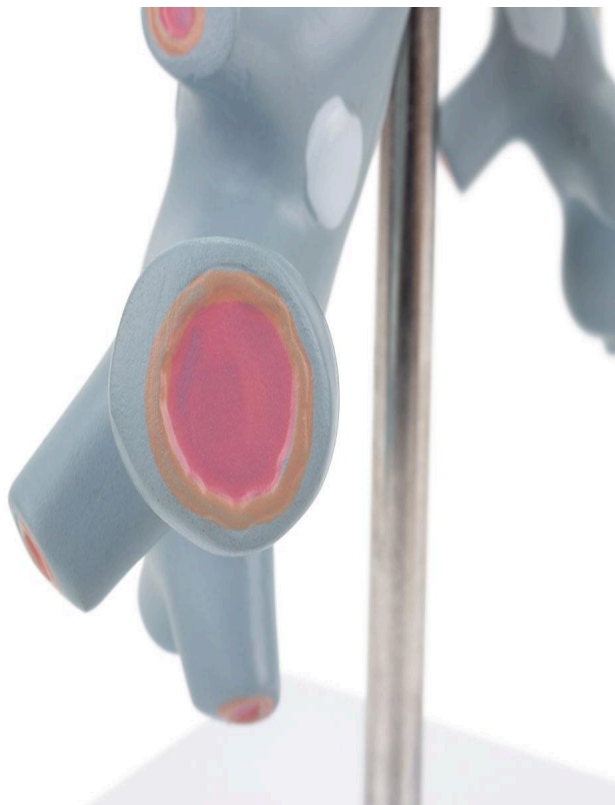
MG31098 | BRONCHICAL TREE WITH PATHOLOGY

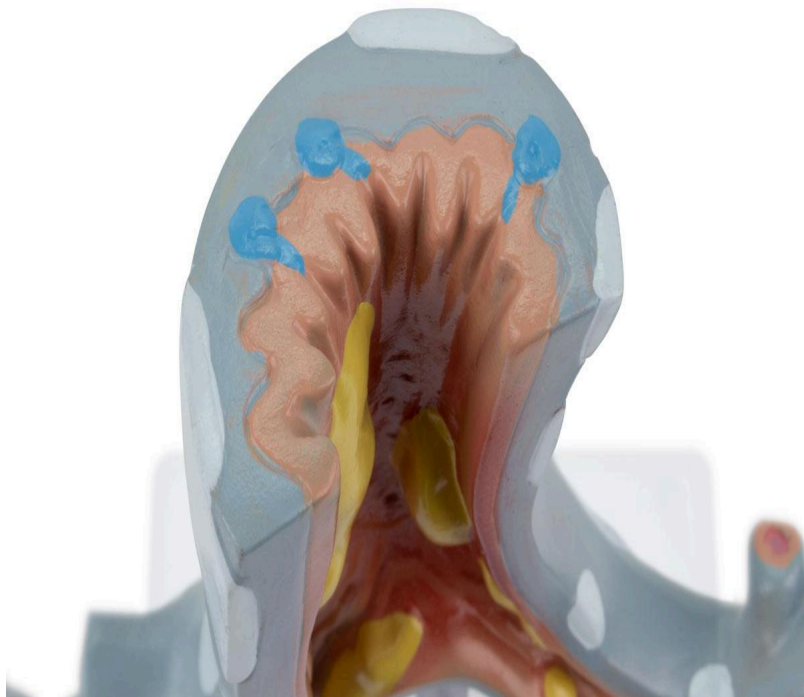
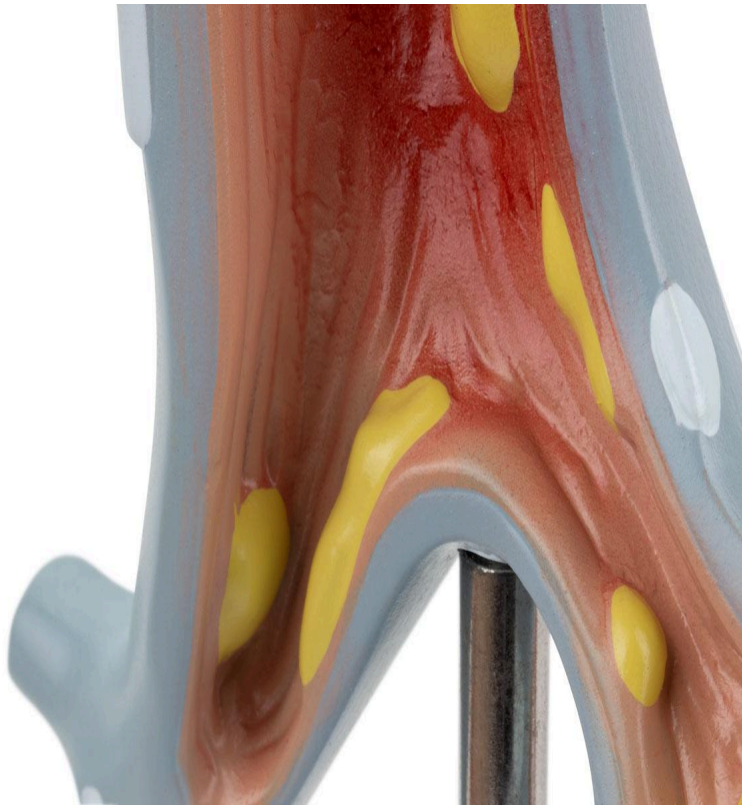


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This detailed anatomical model represents a section of the bronchial tree, magnified 10 times its natural size, exhibiting two important pathologies: bronchitis and bronchiectasis. It is mounted on a polymer base with a metal support and rod, allowing for easy visualization and handling. Hand-painting and numbering of the structures ensure the precise identification of each component.

Applications:

Ideal for the study of anatomy in schools and universities; surgical dissection training; patient explanations; medical and scientific information; respiratory system studies; demonstration of procedures.

Technical Advantages:

- * High-fidelity natural molding;
- * Manufactured from resistant and durable synthetic material;
- * Precise replicas;
- * Hand-painted;
- * Includes an information card with related structures;
- * Resin approved in toxicological tests;
- * High didactic value;
- * Created from precise anatomical knowledge.

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 assists learning, allowing for comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Scale: 10x natural size
- * Material: Synthetic resin

Main Structures:

Airway narrowing: Refers to the constriction of the bronchial lumen, which can be caused by various conditions, including inflammation, muscle spasm, or obstruction by secretions or foreign bodies. In the model, it represents one aspect of bronchitis.



Tracheal wall mucosa: The tracheal mucosa is a mucous membrane that lines the inside of the trachea. It is composed of a pseudostratified ciliated columnar epithelium, with goblet cells secreting mucus, and a lamina propria of connective tissue. Its function is to humidify and clean the inhaled air.

Trachea: The trachea is a cartilaginous tube that connects the larynx to the bronchi. Its structure is composed of incomplete "C"-shaped cartilaginous rings, joined by ligaments and muscles. It serves as the main airway for air to the lungs.

Inflammation: In the context of this model, inflammation represents a key component of bronchitis. Characterized by edema, hyperemia, and infiltration of inflammatory cells in the bronchial mucosa, leading to airway narrowing and increased mucus production.

Mucus: A viscous substance produced by the goblet cells of the bronchial mucosa. Under normal conditions, it helps to humidify and clean the inhaled air. In bronchitis, mucus production is increased, contributing to airway obstruction.

Tracheal bifurcation: The point where the trachea divides into the right and left main bronchus. It is an important anatomical structure, marking the beginning of the bronchial tree.

Membranous wall: The posterior portion of the trachea, devoid of cartilage, formed by connective tissue and smooth muscle. It contributes to the flexibility of the trachea.

Left main bronchus: One of the two main bronchi originating from the tracheal bifurcation, carrying air to the left lung. It is generally narrower and longer than the right bronchus.

Secondary bronchus: Smaller branches that originate from the main bronchi, distributing air to the lung lobes. This model demonstrates bronchial branching.

Right main bronchus: One of the two main bronchi, conducting air to the right lung. It is wider and shorter than the left bronchus.

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, supplying 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:



- Airway narrowing
- Tracheal wall mucosa
- Trachea
- Inflammation
- Mucus
- Mucus
- Tracheal bifurcation
- Membranous wall
- Left primary bronchus
- Secondary bronchus
- Right primary bronchus
- Secondary bronchus