

Q14 – Bronchopulmonary Segments of Lungs

Definition Note

A bronchopulmonary segment is a structurally and functionally independent subdivision of a lung lobe, supplied by a segmental (tertiary) bronchus and a corresponding branch of the pulmonary artery. Each segment is separated from adjacent segments by connective tissue septa.

Characteristic Features

Each bronchopulmonary segment is pyramidal in shape with its apex directed toward the hilum and base toward the pleural surface. It has its own bronchial and arterial supply, while pulmonary veins run in the intersegmental planes. Due to this independence, segments can be surgically removed without affecting neighboring segments.

Number of Segments

The right lung is divided into ten bronchopulmonary segments, whereas the left lung has eight to ten segments, commonly described as eight segments due to fusion of some segments.

Segments of Right Lung

The superior lobe has three segments: apical, posterior, and anterior. The middle lobe has two segments: medial and lateral. The inferior lobe has five segments: superior, medial basal, anterior basal, lateral basal, and posterior basal.

Segments of Left Lung

The superior lobe has apical, posterior, anterior, superior lingular, and inferior lingular segments. The inferior lobe has superior, anteromedial basal, lateral basal, and posterior basal segments.

Blood and Nerve Supply

Each segment is supplied by a segmental branch of pulmonary artery. Venous drainage occurs through pulmonary veins located in intersegmental planes. Nerve supply is provided by autonomic fibers from the pulmonary plexus.

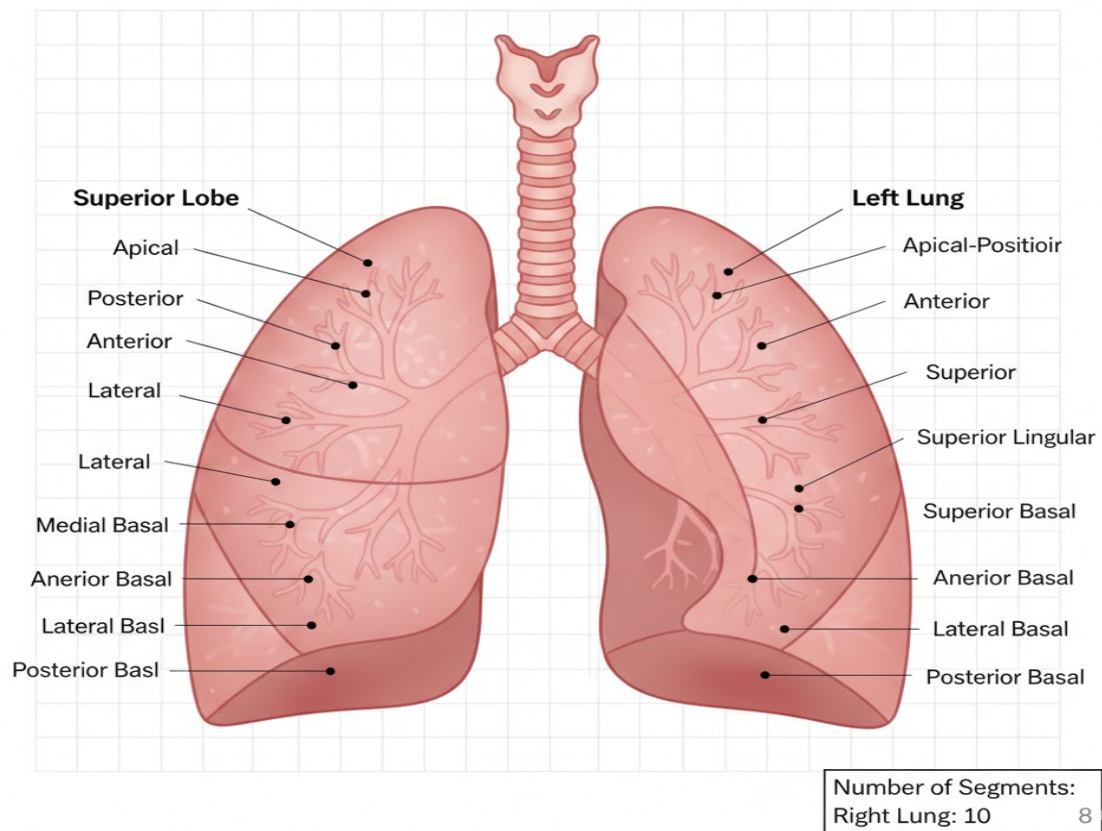
Applied Anatomy

Knowledge of bronchopulmonary segments is essential in segmentectomy, bronchoscopy, and radiological interpretation. Aspiration pneumonia commonly affects posterior segments of upper lobes and superior segments of lower lobes.

Labeled Diagram – Bronchopulmonary Segments of Lungs

Bronchopulmonary Segments - Anterior View

Thursday, February 5, 2026 at 1:41:44 PM IST



Conclusion: Bronchopulmonary segments are anatomically and functionally independent units of the lungs. Their segmental organization is of great importance in diagnosis, surgery, and clinical management of lung diseases.