

Module: Respiratory system

- **Topic** : Destructive pulmonary diseases. Morphological characteristics, outcomes and complications. Causes of death. Causes of death. Peculiarities in children.
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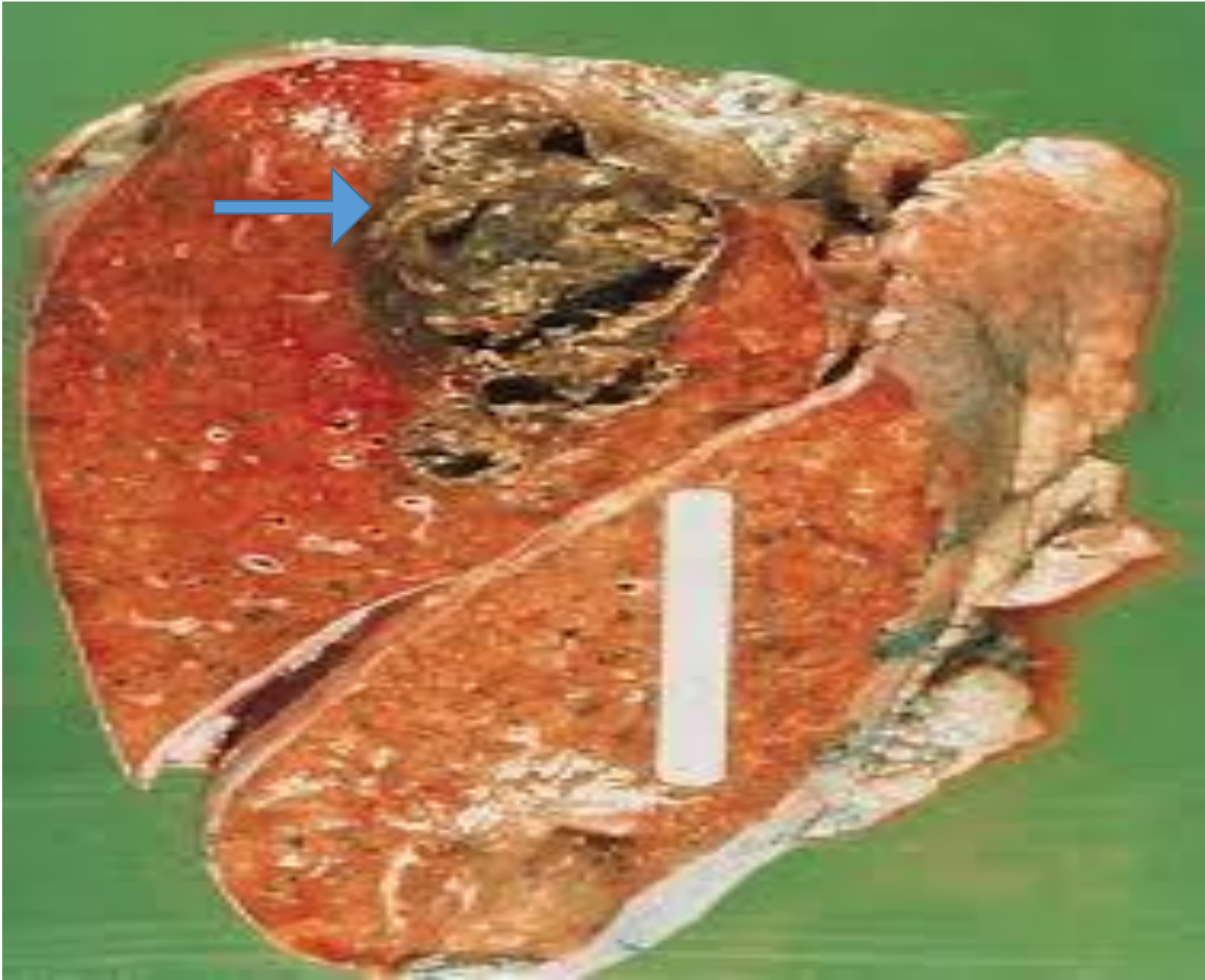
The aim of lesson :

- Learn how to determine the morphological characteristics of lung destructive diseases (Abscesses, gangrene) explain the causes, mechanism of development and outcomes. To be able to assess the significance of potential complications. To study the pathogenesis and morphological characteristics of lung abscess and gangrene, peculiarities in children. Correlate morphology with clinical manifestations, possible complications and causes of death.

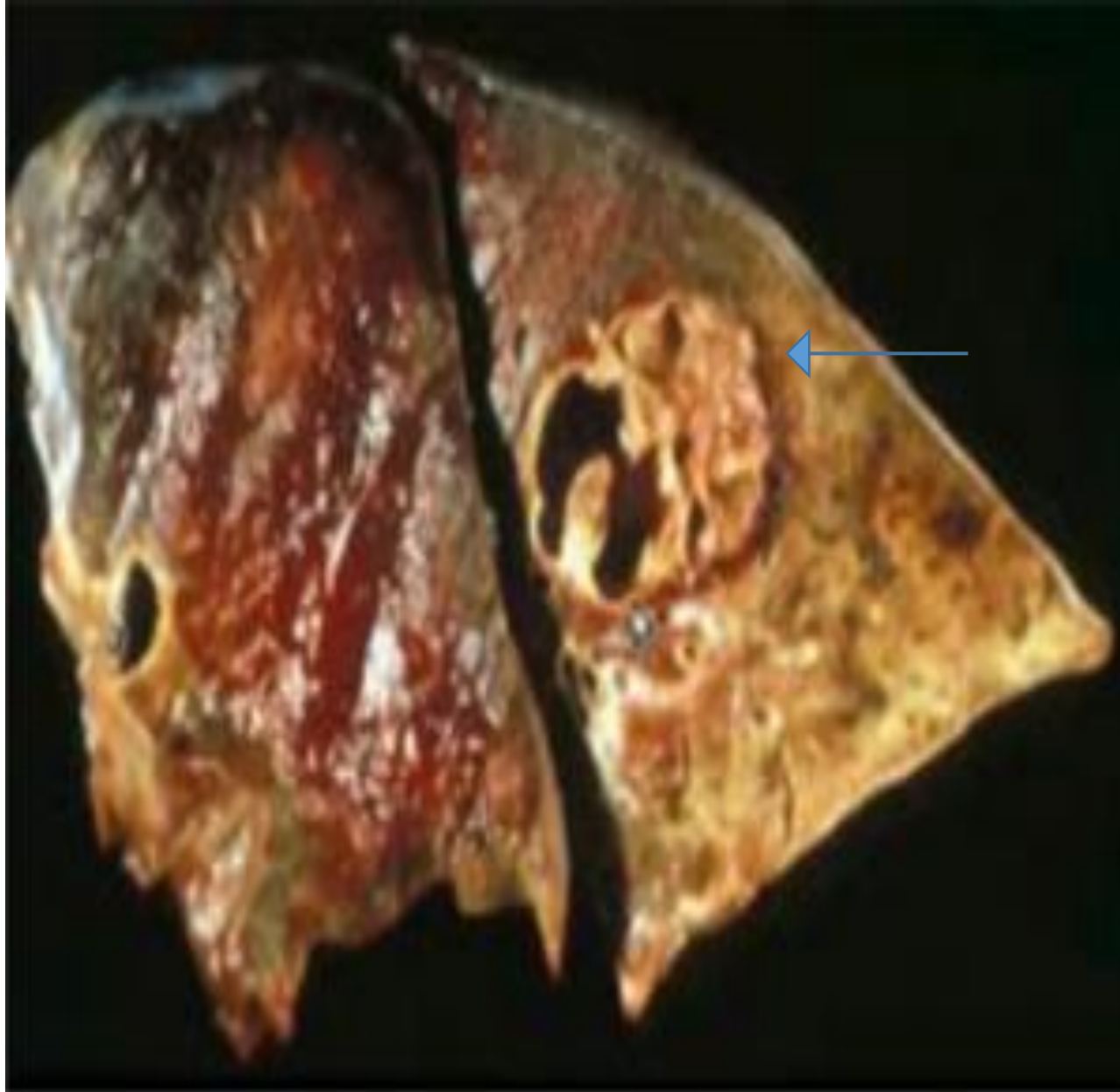
The objectives :

- **Student must know :**
- Morphological characteristics of pulmonary destructive diseases, gangrene, chronic abscess;
- Age peculiarities;
- Correlate morphology with clinical manifestations, possible complications and causes of death
- **Student must be able :**
 - how to determine the morphological characteristics of lung destructive diseases (Abscesses, gangrene) explain the causes, mechanism of development and outcomes. To be able to assess the significance of potential complications.

Lung abscess



lung abscess





ABSCESS CAVITY
WITH FLUID LEVEL



ANAEROBIC BACTERIA

Specimen shows
large, necrotic ab-
scess containing
fluid surrounded
by consolidated
lung tissue.

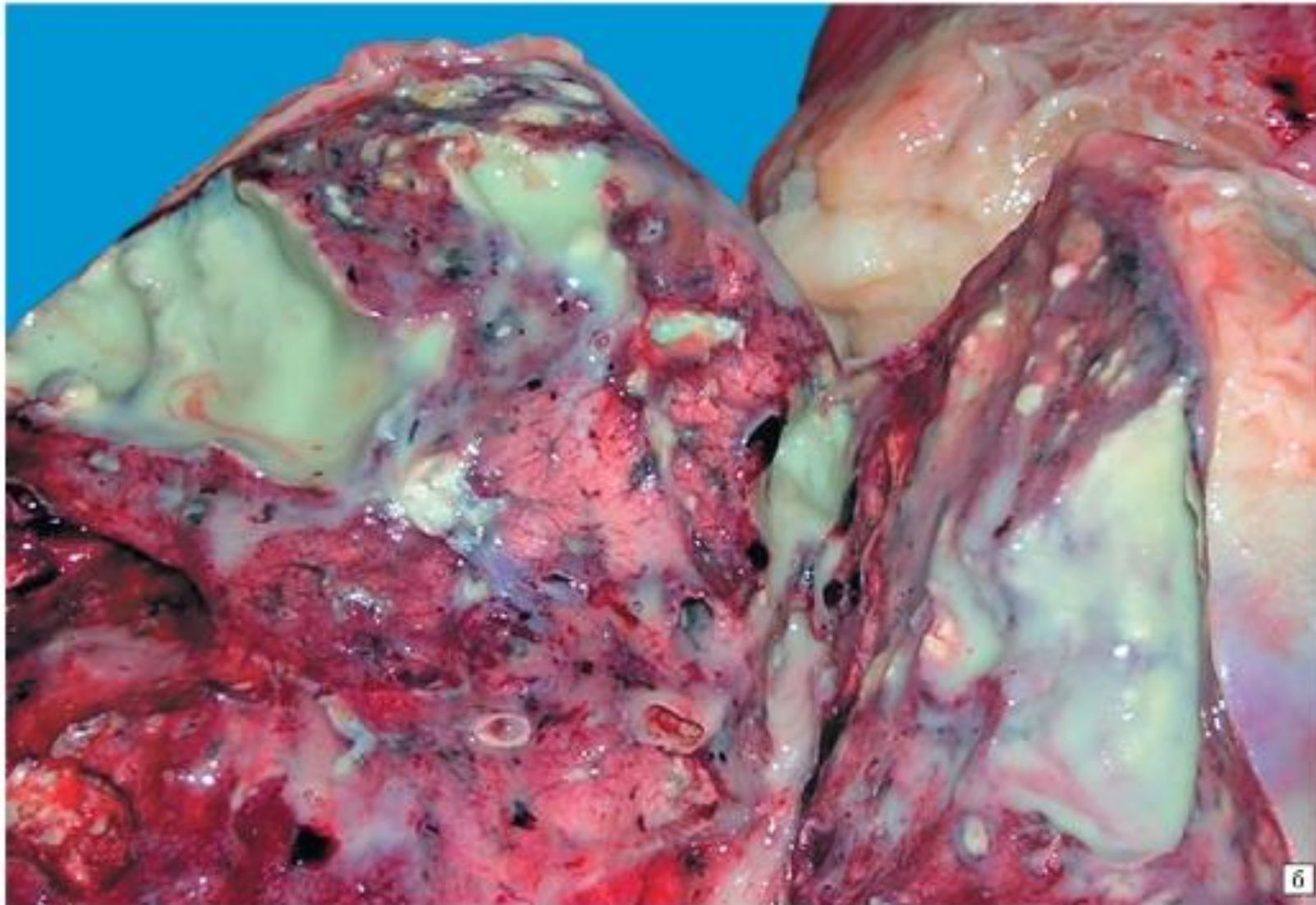
AFTER
THORACECTOMY
AND DRAINAGE



lung abscess



lung abscess



Upper lobe

Pleura

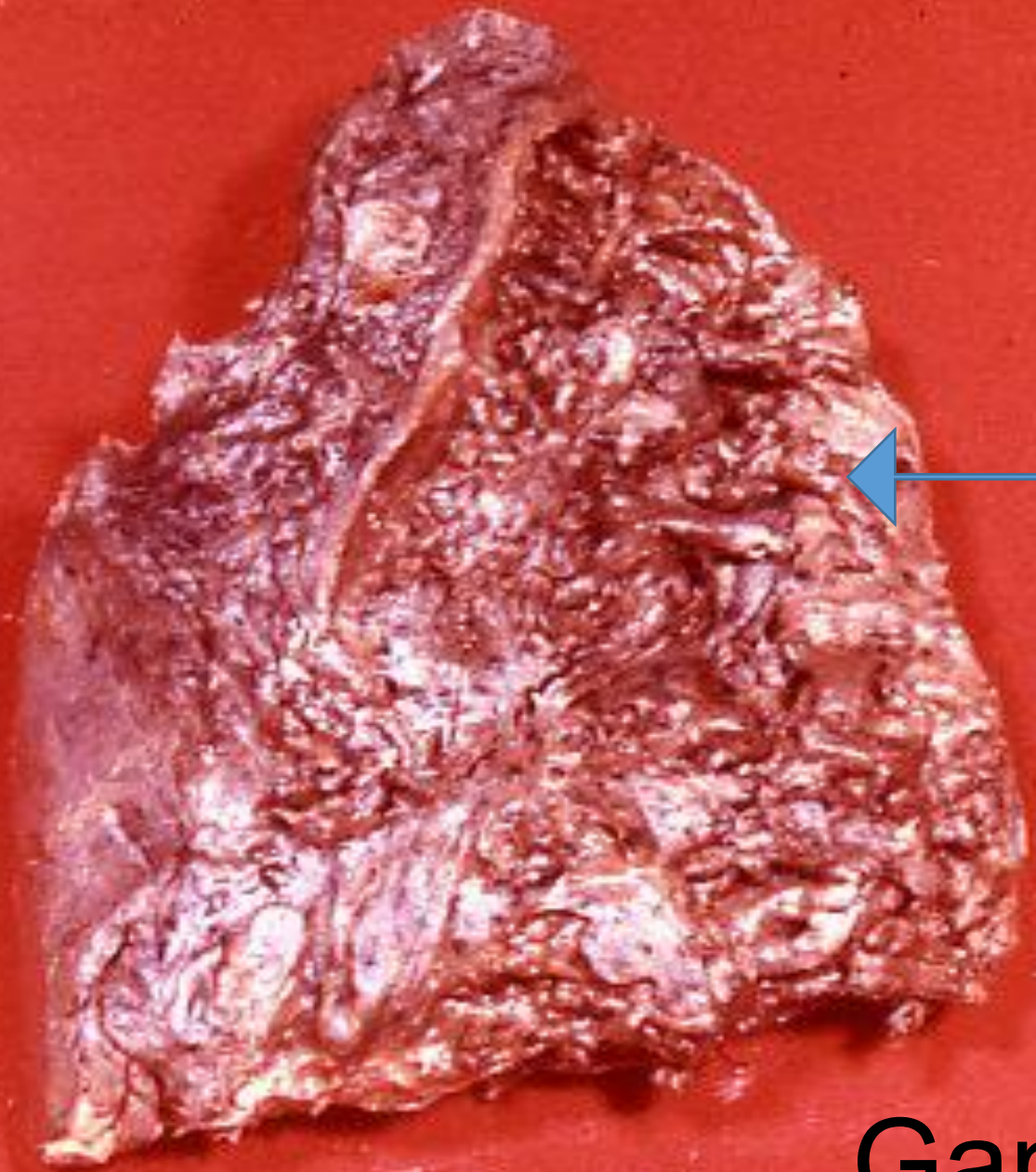
Abscess

Fibrous tissue

Middle lobe

Lower lobe





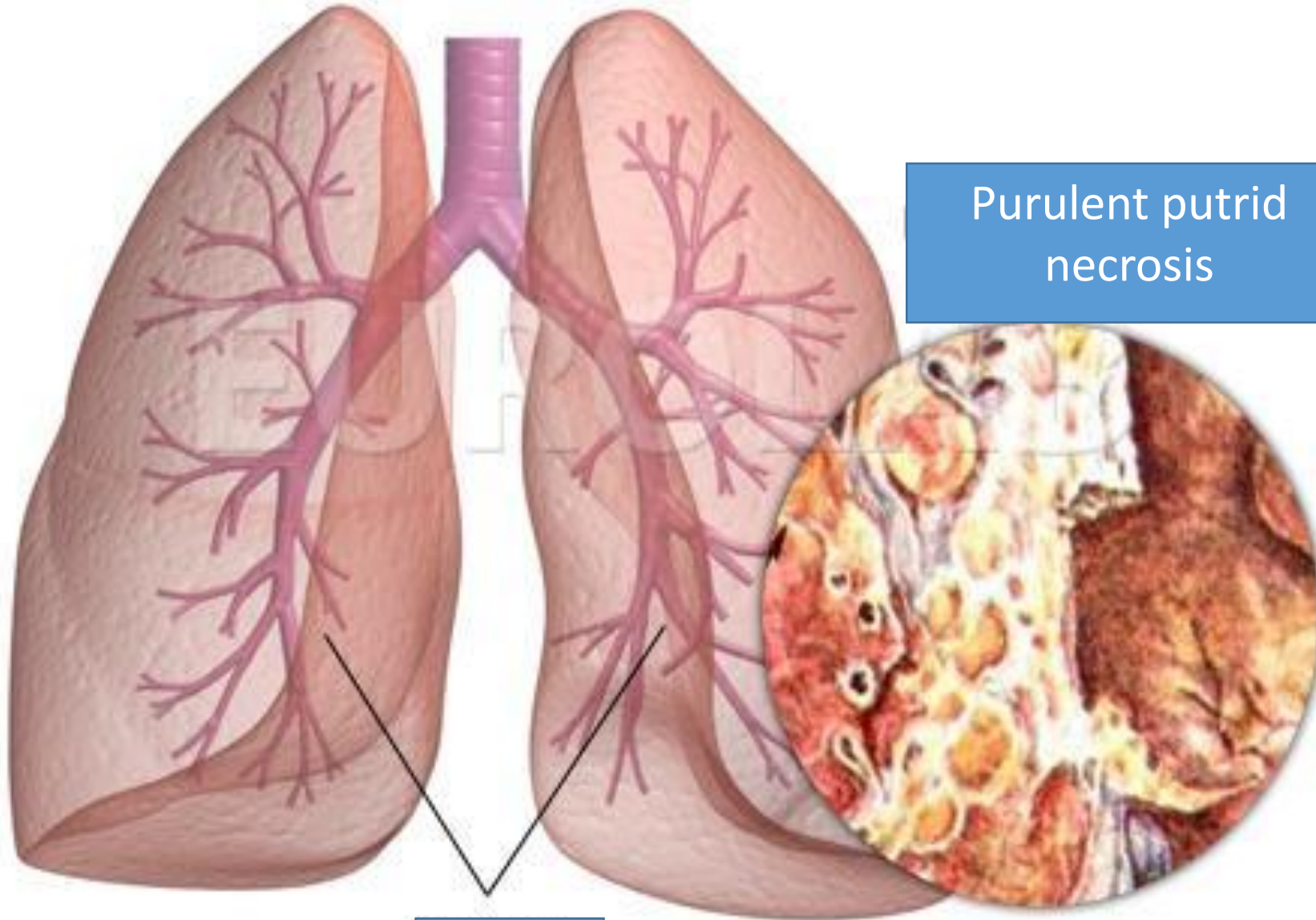
Gangrene

lung abscess



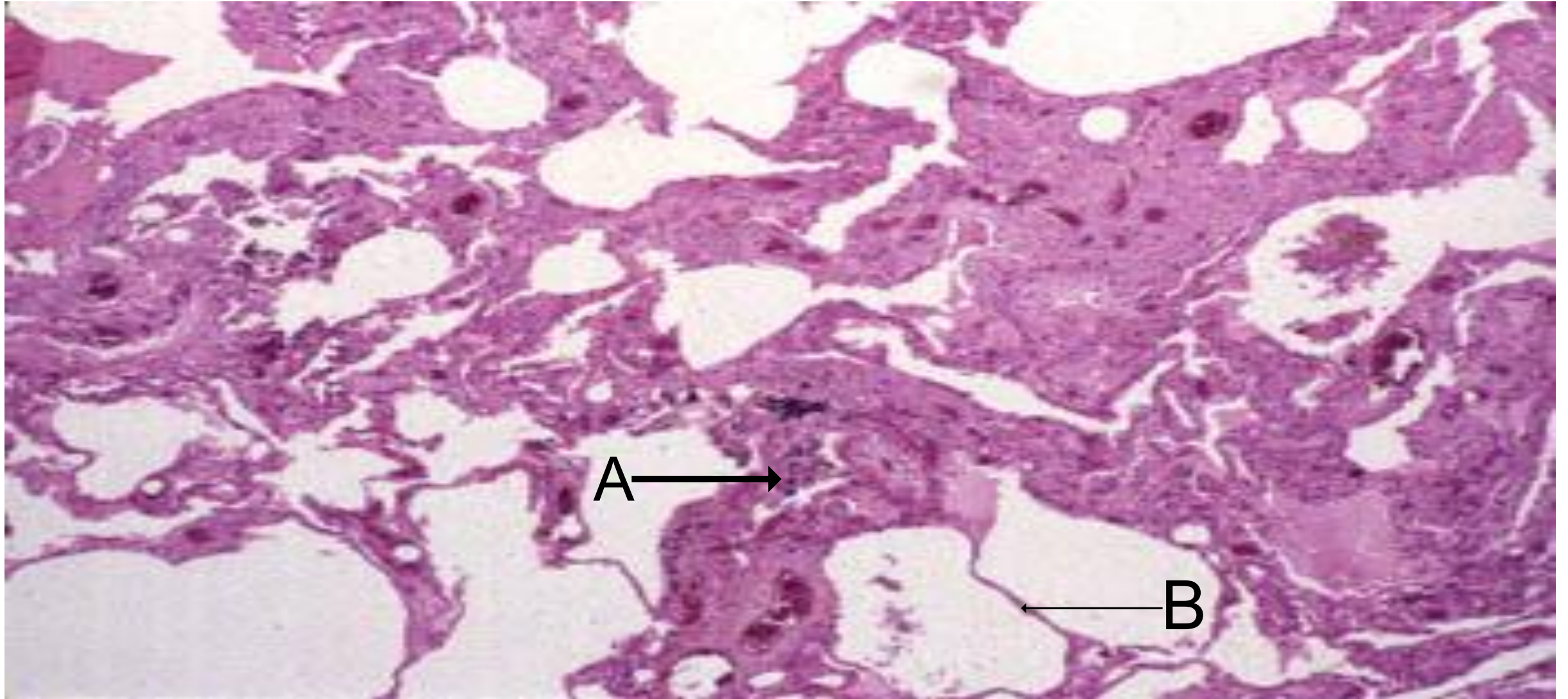
Lung gangrene

Purulent putrid
necrosis



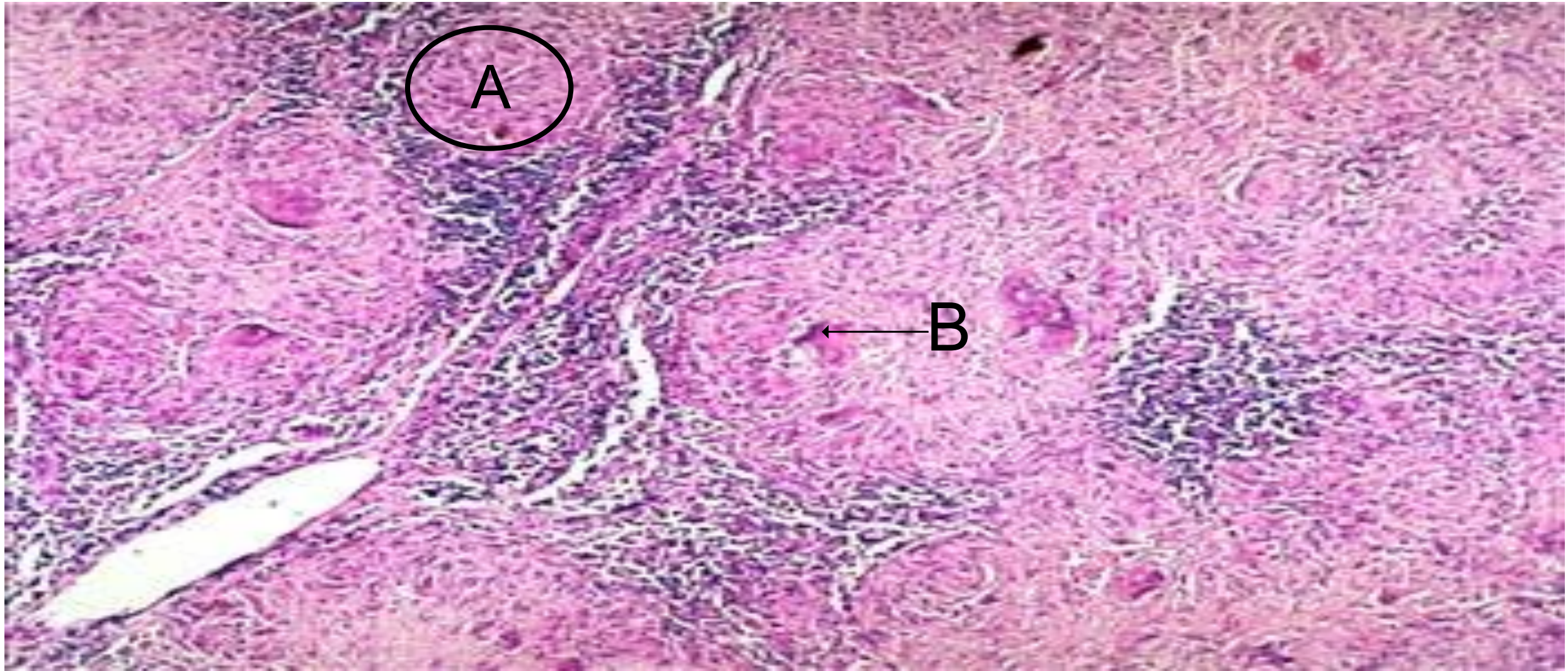
Lungs

Lung tissue with asbestosis



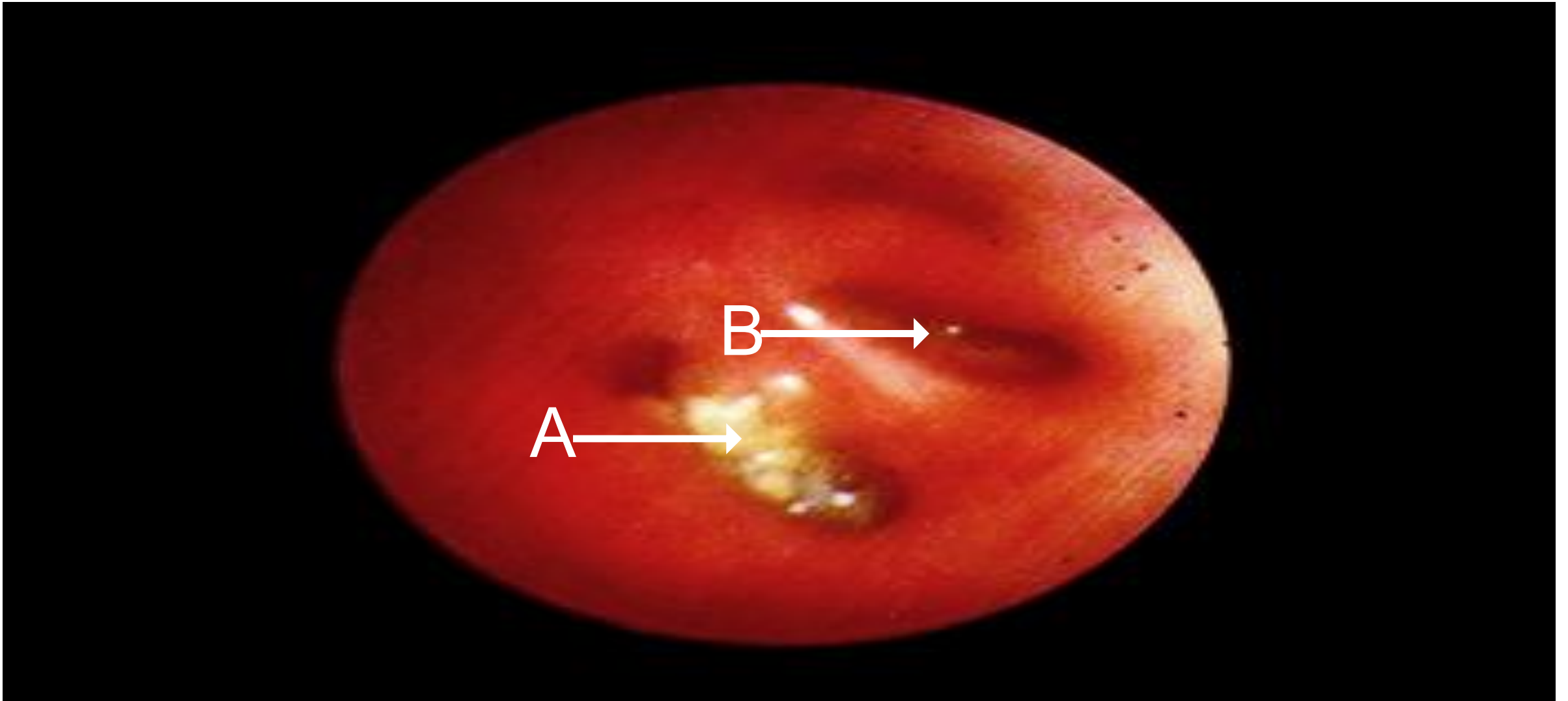
A-fibrosis of interalveolar walls, B-unaltered inter alveolar septa.

Lymph nodes in sarcoidosis



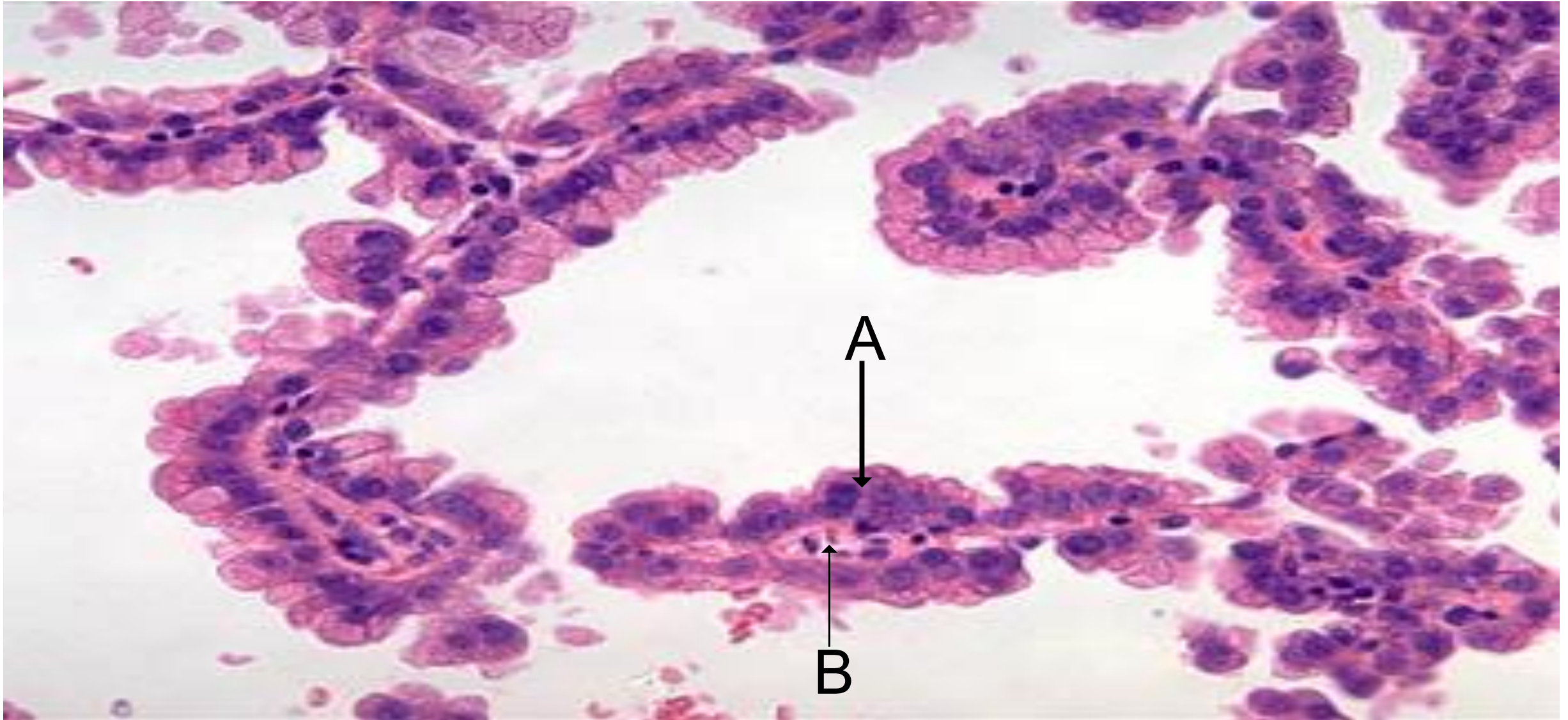
A - noncaseous granuloma, B-giant cell.

Lungs, polypoid tumor



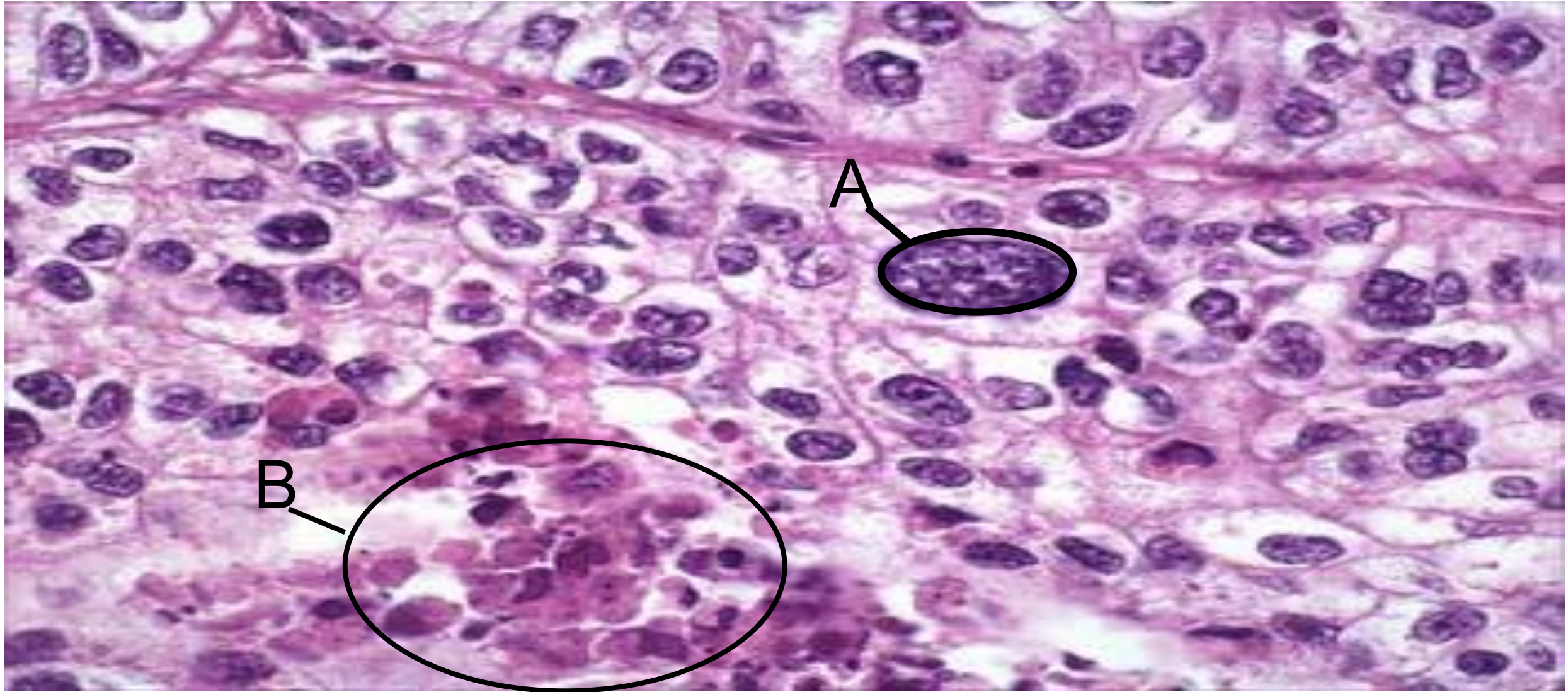
A-polypoid tumor B-segmental bronchus.

Lungs, peripheral adenocarcinoma



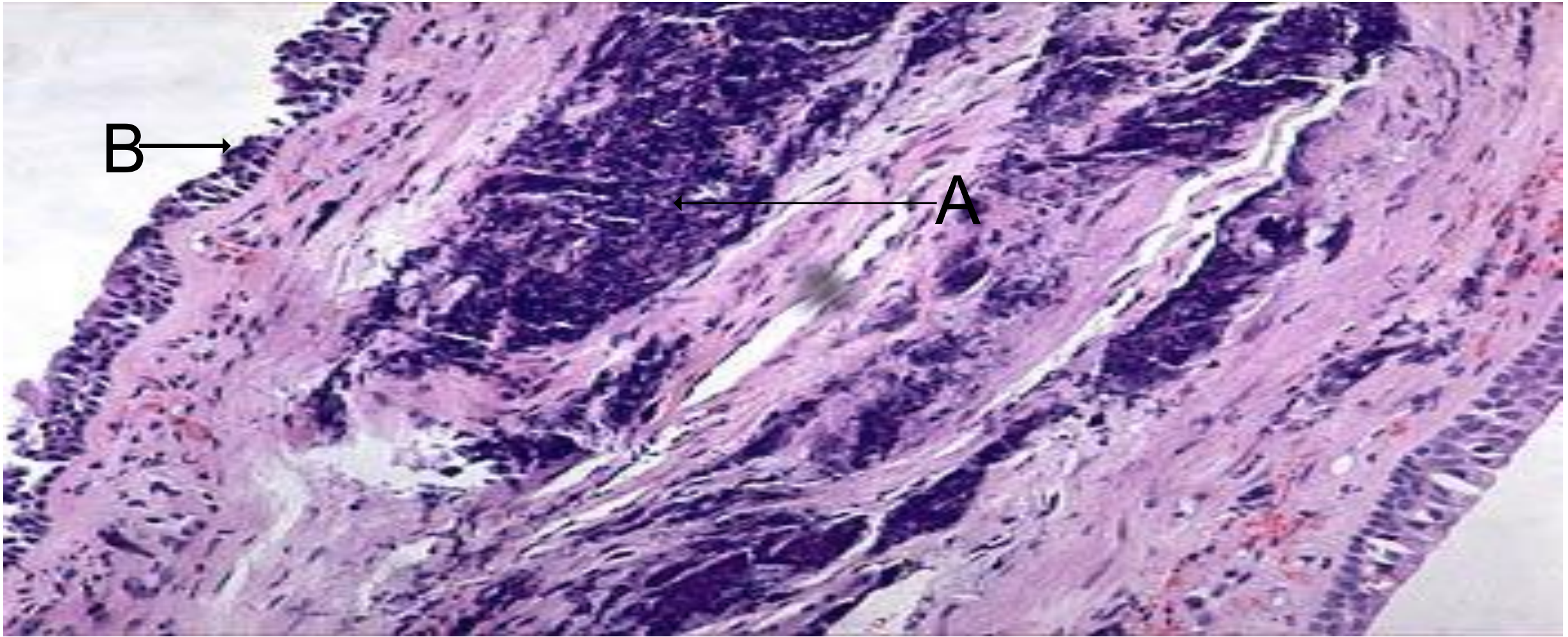
A-papillary outgrowths, B-fibrovascular trunk

Large-cell lung cancer



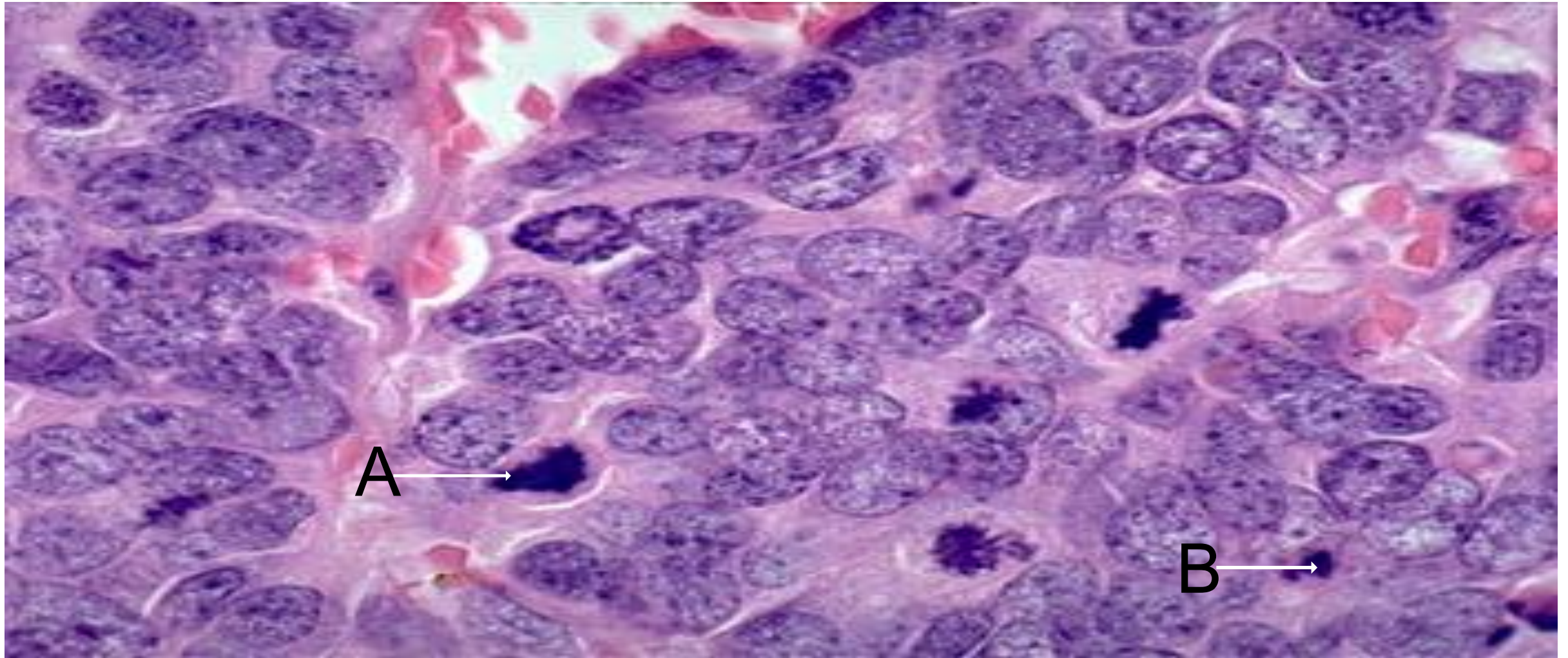
A-giant cells, B – focal necrosis.

Material of bronchoscopy in lung cancer



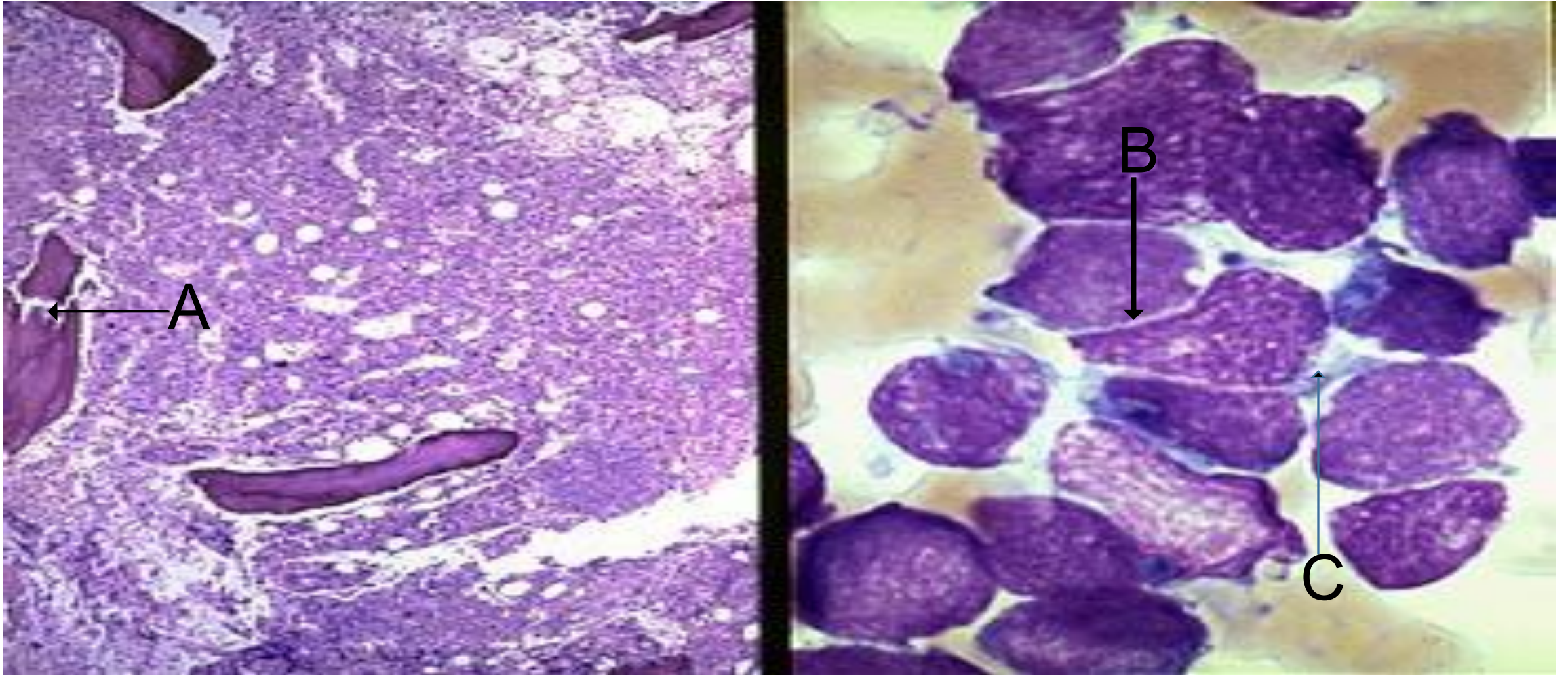
A-infiltrative tumor, B-epithelium.

Lymph Node biopsy



A-mitosis, B-apoptosis

A bone marrow biopsy (metastases)



A-bone tissue lysis, B- merger of nuclei, C- scanty cytoplasm