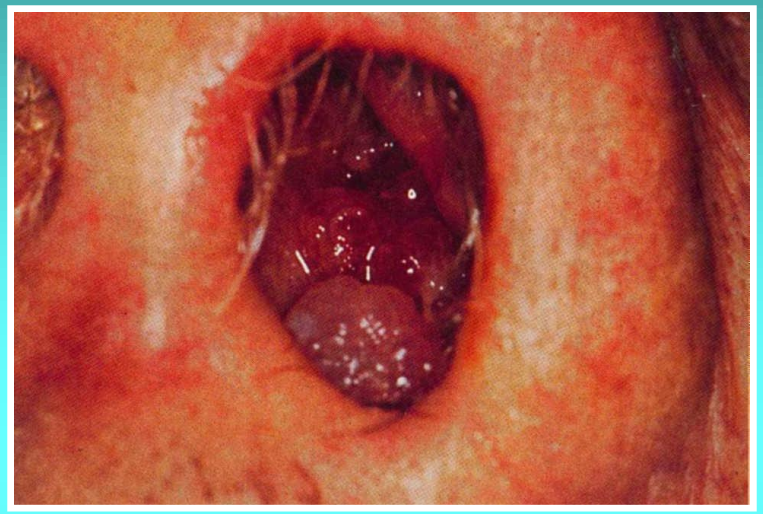
LECTURE 13

THEOPHILE RENE HYACINTHE LAENNEC (1781-1826)

PATHOLOGY OF NASAL CAVITY AND SINUSES

RHINITIS AND SINUSITIS

ALLERGIC RHINITIS



POLYPOUS RHINITIS

RHINOSCLEROMA

- **RHINOSCLEROMA** IS A CHRONIC GRANULOMATOUS CONDITION OF THE NOSE AND OTHER STRUCTURES OF THE UPPER RESPIRATORY TRACT. **RHINOSCLEROMA** IS A RESULT OF INFECTION BY THE BACTERIUM ***Klebsiella rhinoscleromatis***. THE POLISH SURGEON **JAN MIKULICZ IN WROCŁAW** DESCRIBED THE HISTOLOGIC FEATURES IN 1877; **VON FRISCH** IDENTIFIED THE MICROORGANISM IN 1882

- IT IS **ENDEMIC** TO REGIONS OF AFRICA (EGYPT, TROPICAL AREAS), SOUTHEAST ASIA, MEXICO, CENTRAL AND SOUTH AMERICA AND SOUTHERN EUROPE, BUT IT HAS BEEN INFREQUENT IN USA. Rhinoscleroma reportedly also is rare in Saudi Arabia and Bahrain. Five percent of all cases occur in Africa. However, with current trends in migration, the incidence of rhinoscleroma may be on the rise.


Brown Medical School

PATHOLOGY OF NASAL CAVITY AND SINUSES

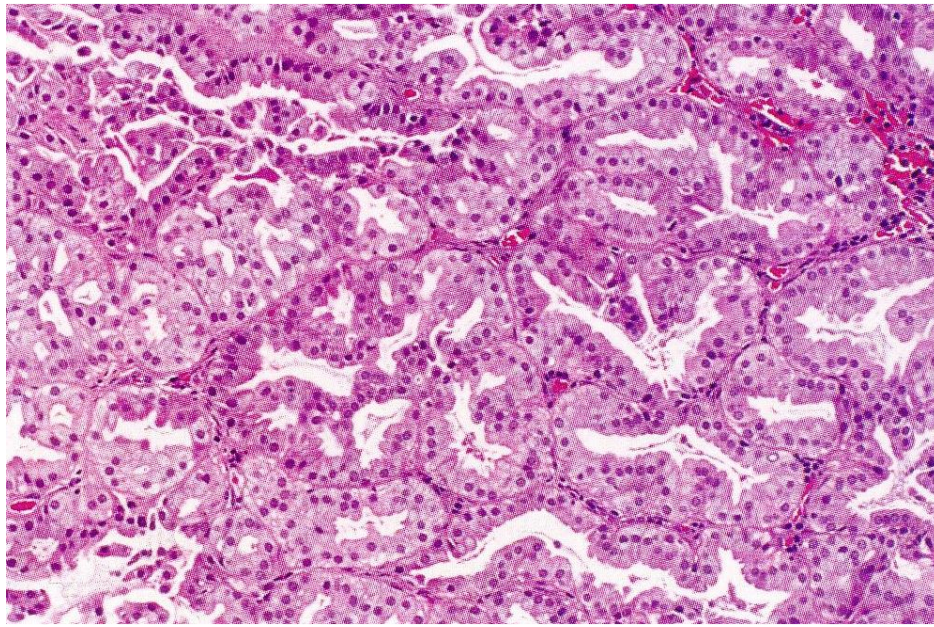
TUMORS OF NASAL MUCOSA AND SINUSES

INVERTED PAPILLOMA

DIFFICULT TO TREAT WITH MANY RELAPSES, ACCOMPANIES AN INVASIVE CANCER.

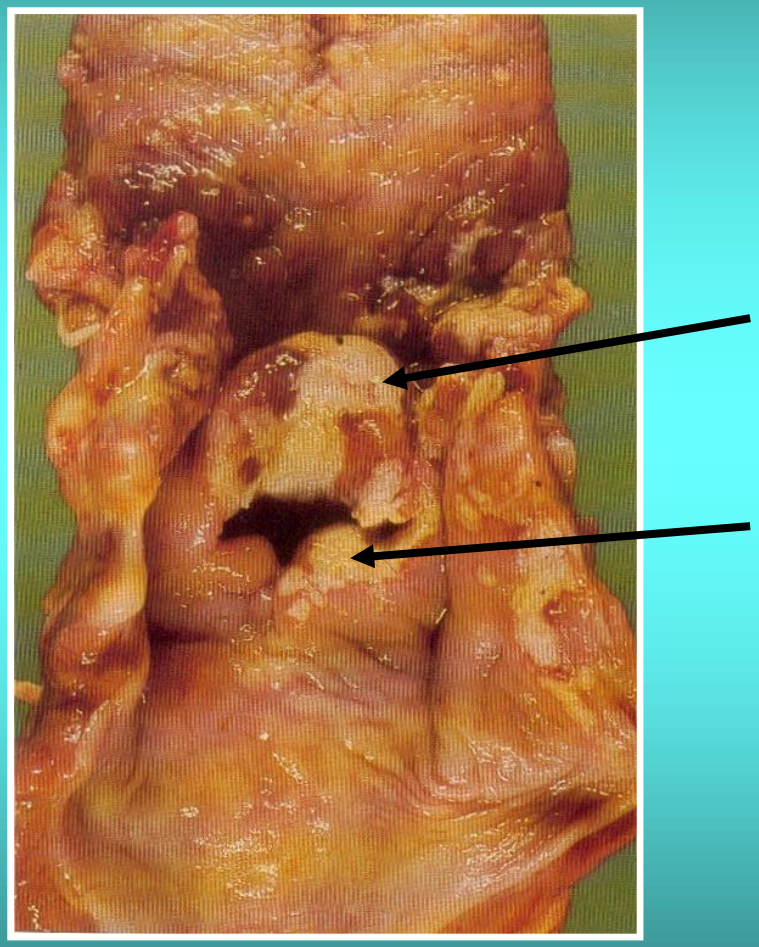
NASOPHARYNGEAL CARCINOMA

RARE, OCCUPIES NOSE AND SINUSES

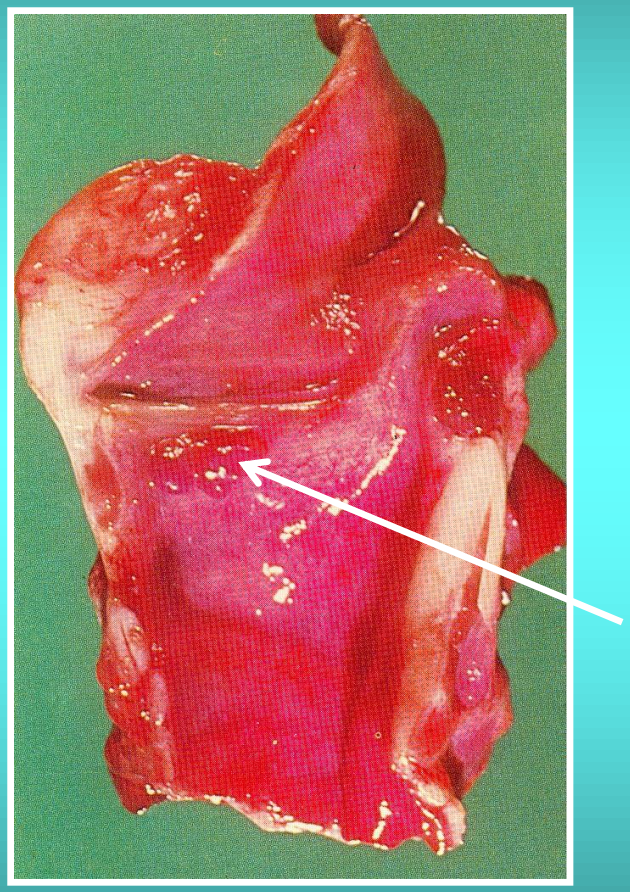


PATHOLOGY OF LARYNX

LARYNGITIS



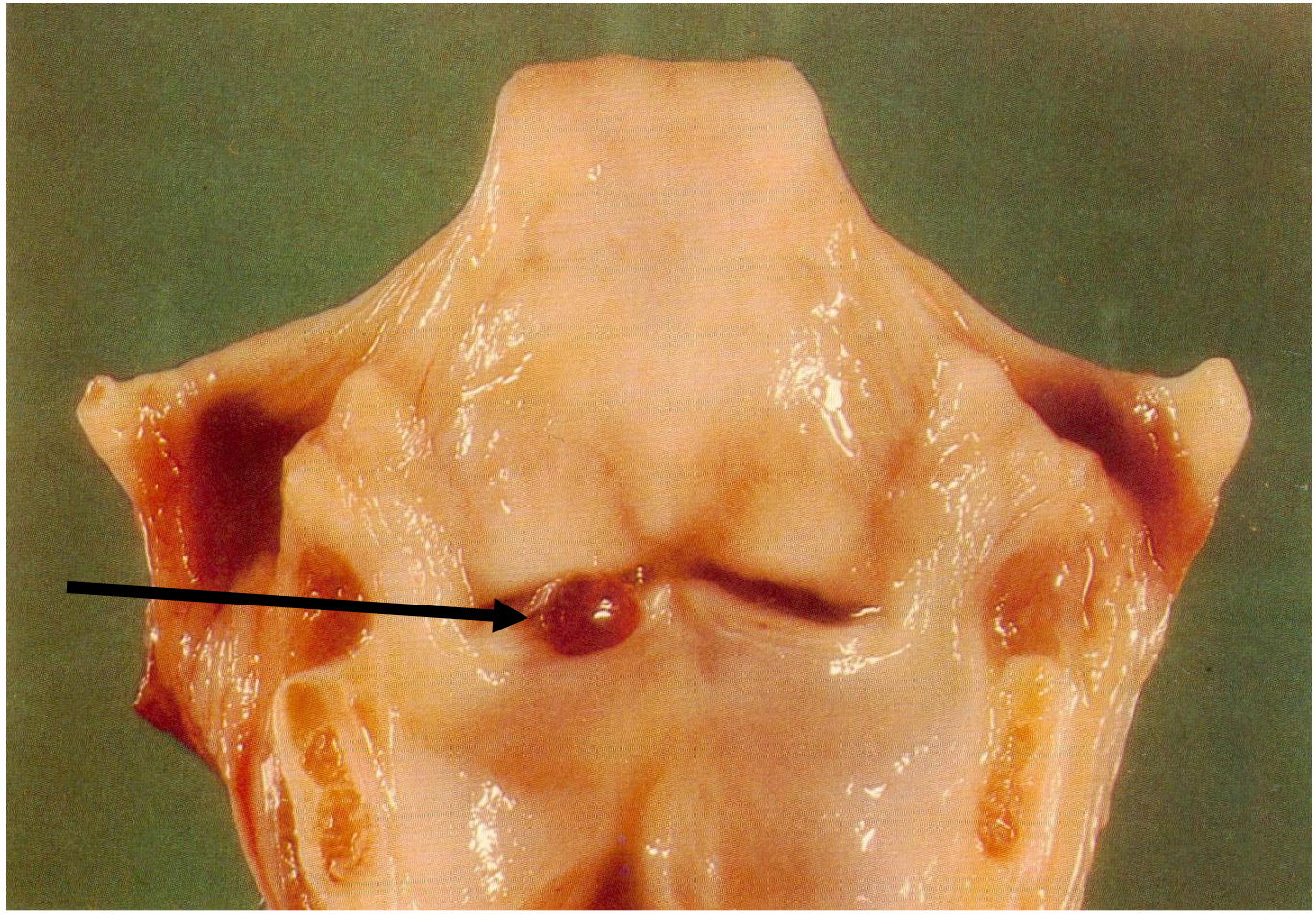
ACUTE LARYNGITIS. DIFFERENT MORPHOLOGICAL FORMS



LARYNGEAL POLYPS. MOST COMMONLY ON VOCAL CHORDS (SINGERS NODES).

PATHOLOGY OF LARYNX

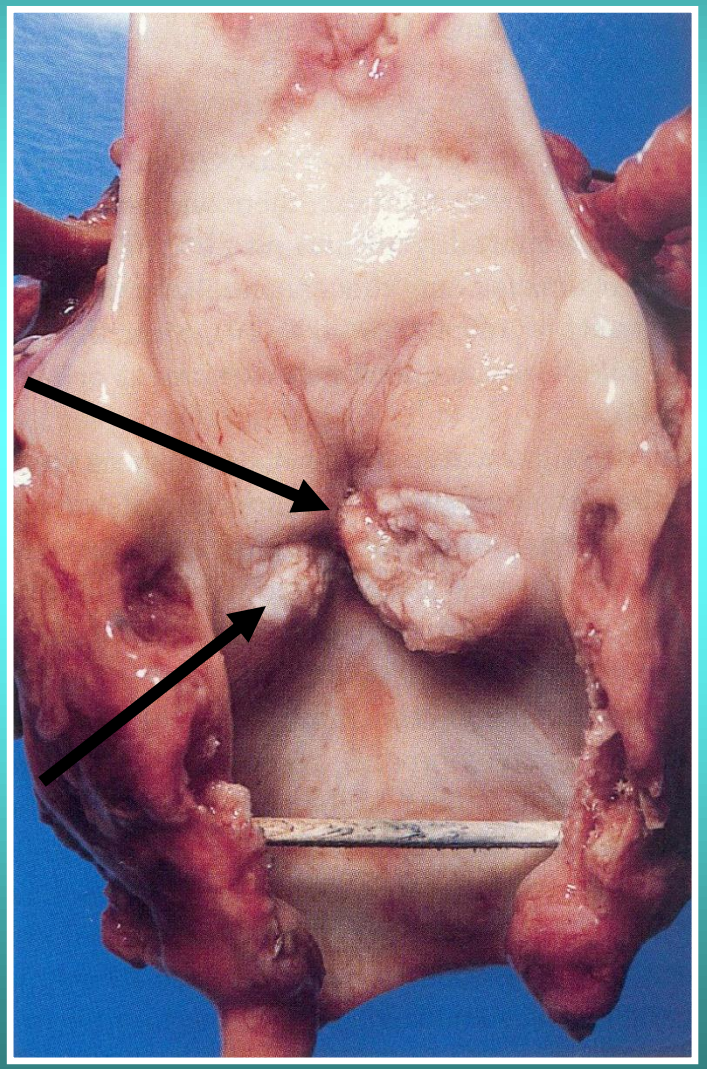
POLYPS AND TUMORS OF LARYNX

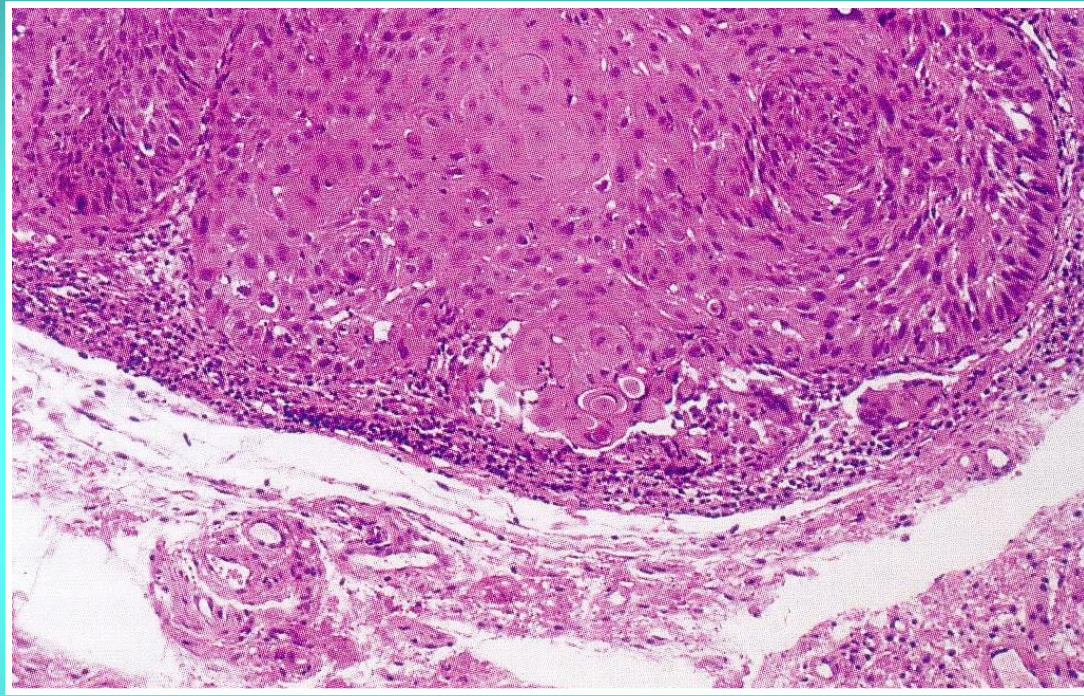


TUMORS OCCUR AS SINGLE OR NUMEROUS IN CHILDREN
(VIRAL ETIOLOGY)

PATHOLOGY OF LARYNX

CARCINOMA OF LARYNX

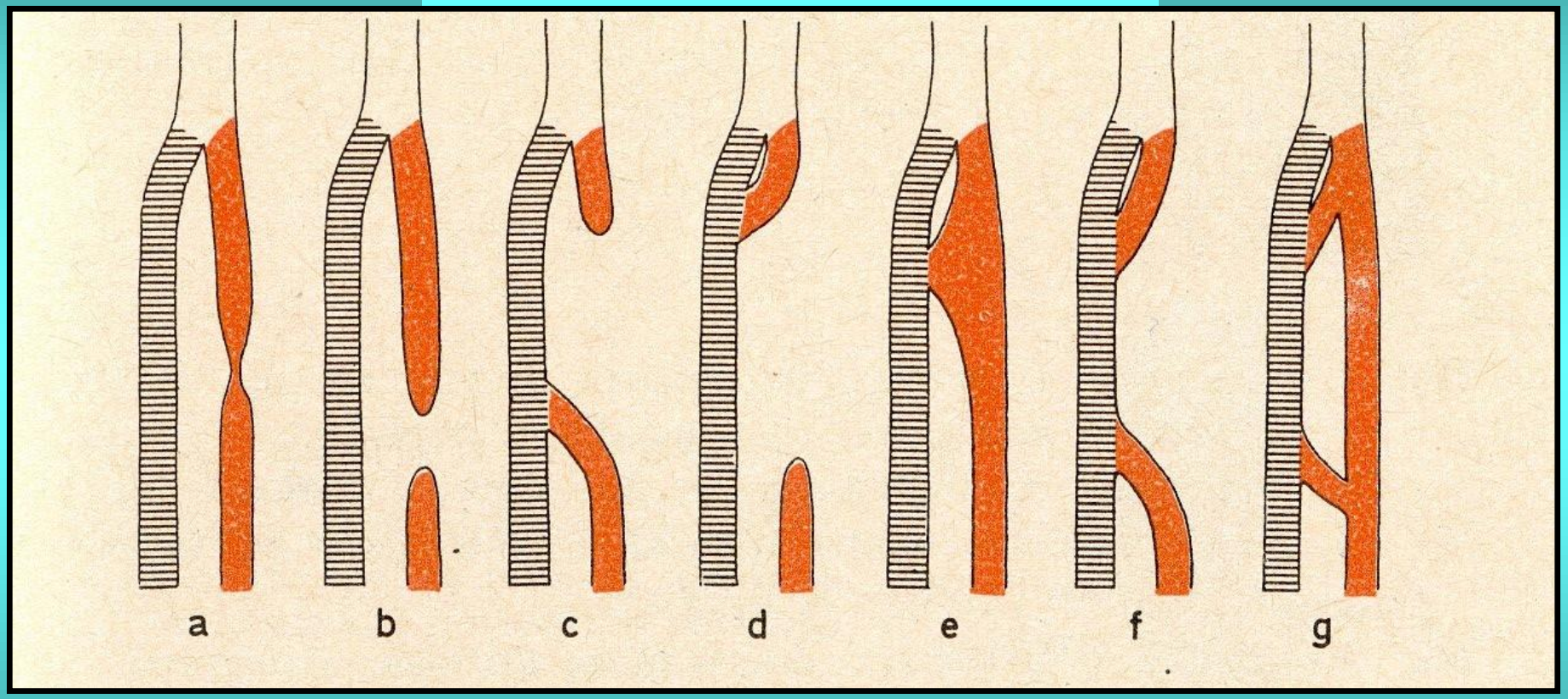




IN 95% OF CASES IT IS A SQUAMOUS CELL CARCINOMA (SCC). OCCURS MORE COMMONLY AMONG SMOKERS AND IN MEN. USUALLY ITS PRECURSOR IS DYSPLASIA (INTRAEPITHELIAL NEOPLASIA) IN THE EPITHELIUM. CHARACTERISTIC IS HOARSENESS THAT CANNOT BE TREATED PHARMACOLOGICALLY. METASTASES TO SURROUNDING LYMPH NODES.

PATHOLOGY OF TRACHEA AND BRONCHI

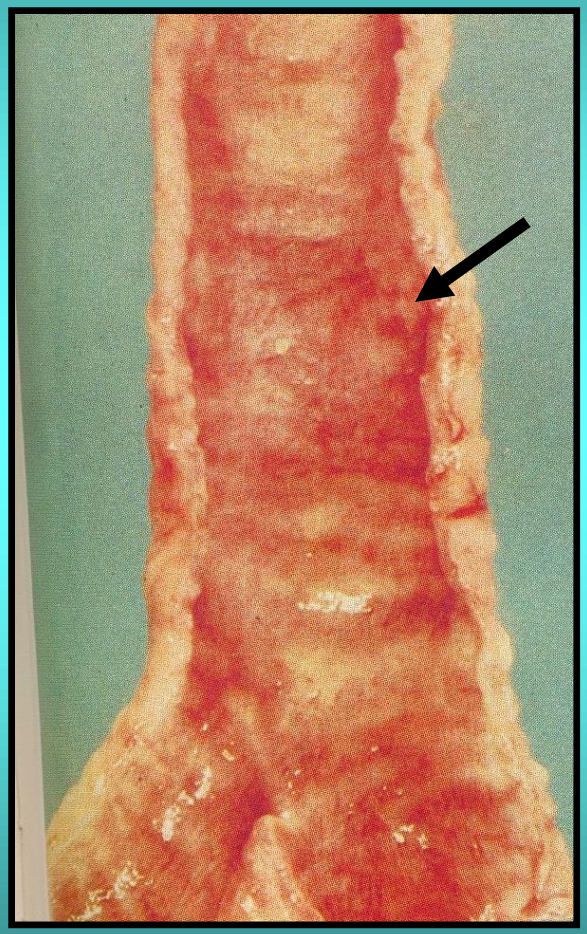
DEVELOPMENTAL DISTURBANCES



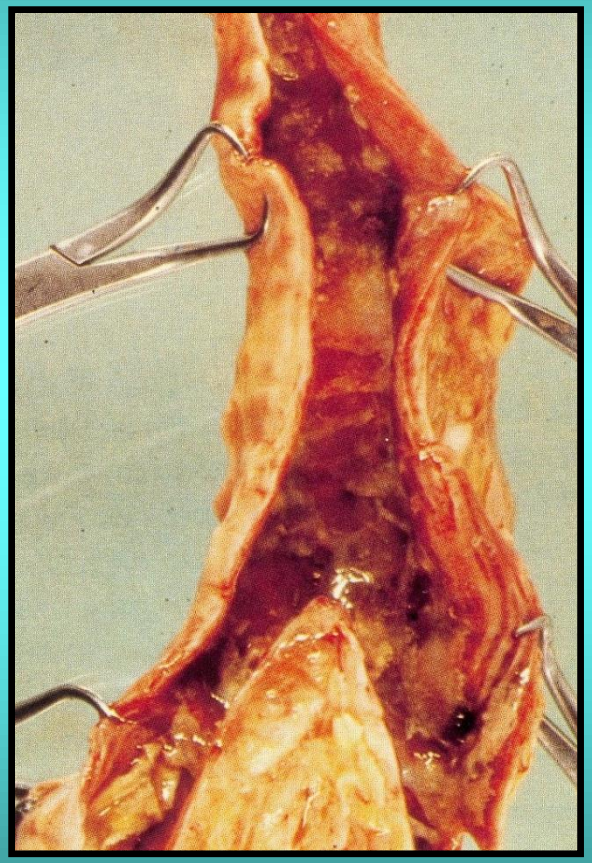
DURING DEVELOPMENT OF THE TRACHEA AND ESOPHAGUS SOMETIMES THE ESOPHAGUS AND TRACHEA MAY MERGE AT SOME POINTS.

PATHOLOGY OF TRACHEA AND BRONCHI

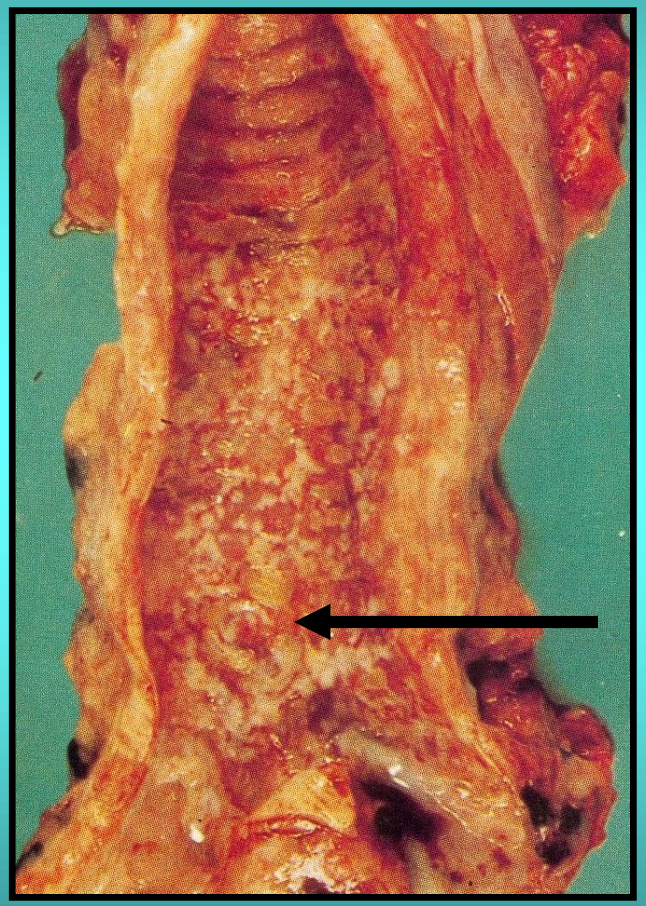
TRACHEITIS AND BRONCHITIS



ACUTE EROSIVE TRACHEITIS



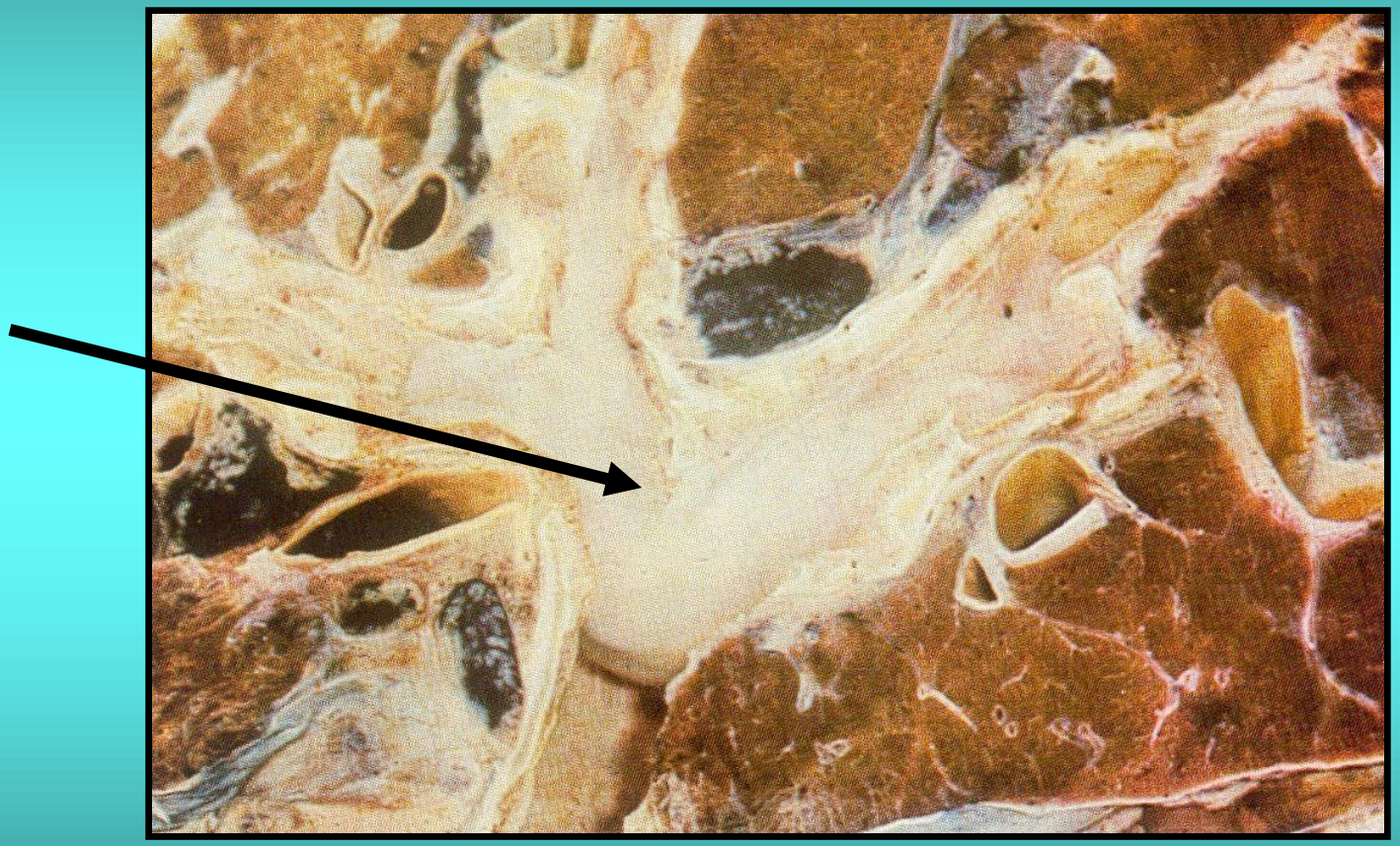
HEMORRHAGIC TRACHEITIS



GRANULOMATOUS TRACHEITIS

PATHOLOGY OF TRACHEA AND BRONCHI

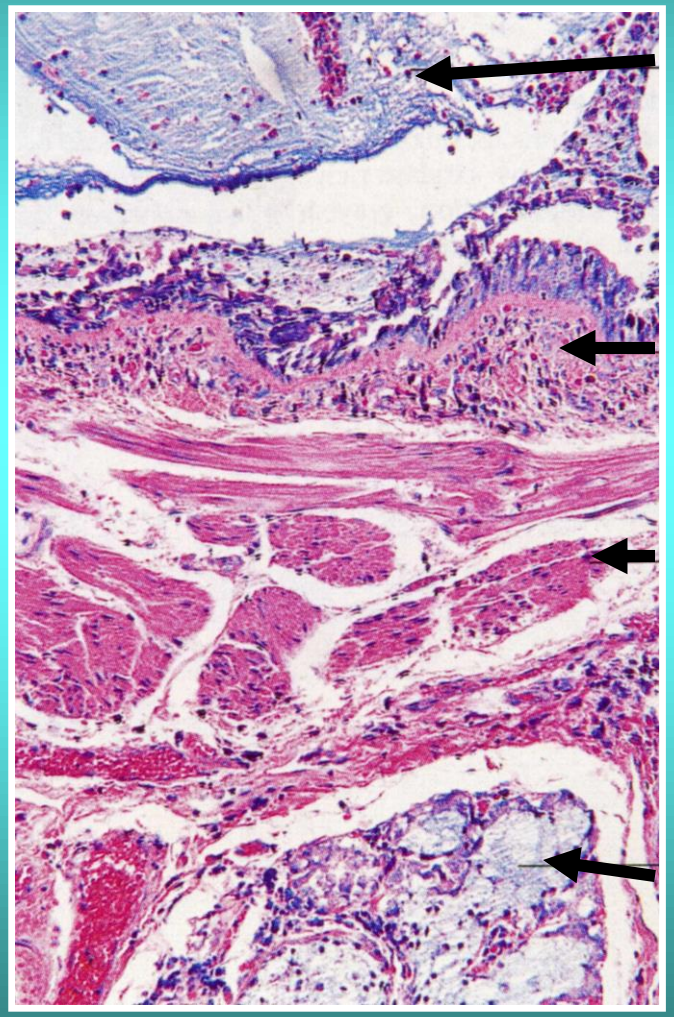
TRACHEITIS AND BRONCHITIS



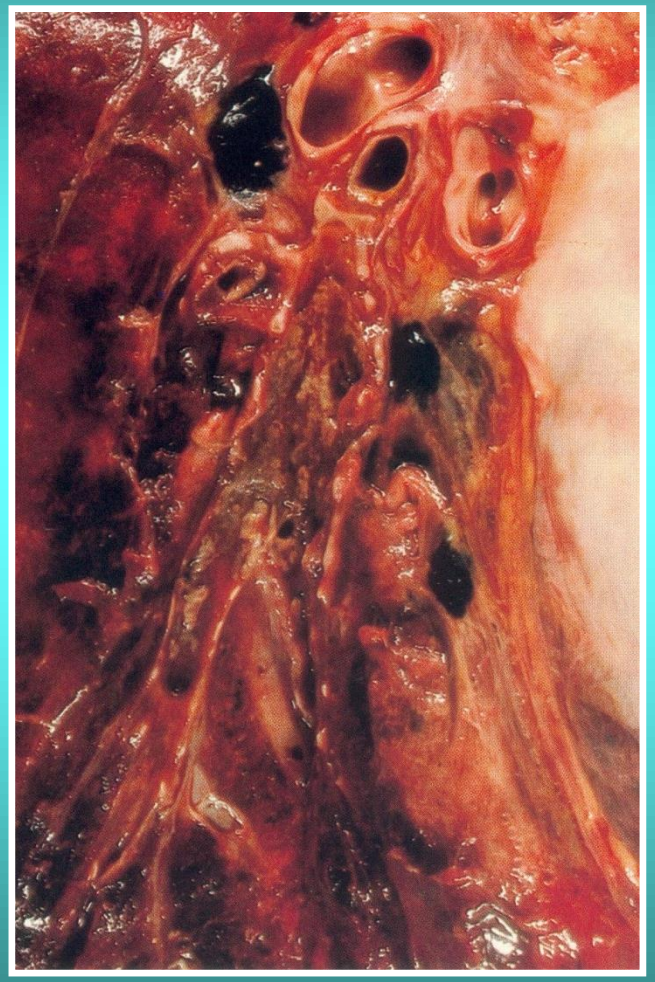
CHRONIC CATARRHAL BRONCHITIS

PATHOLOGY OF TRACHEA AND BRONCHI

TRACHEITIS AND BRONCHITIS



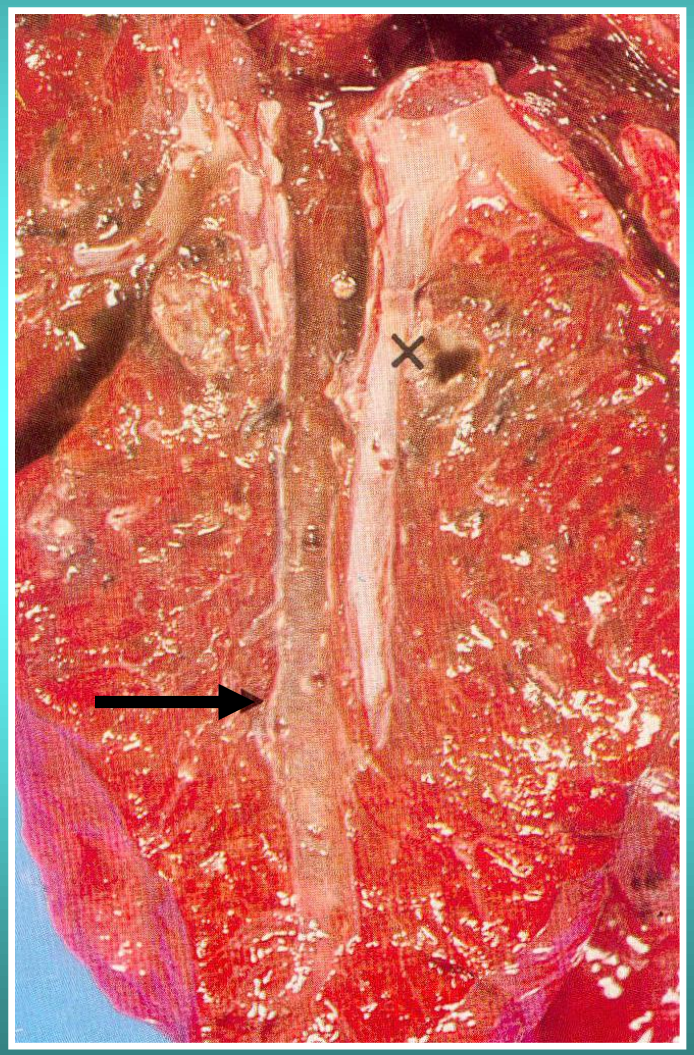
BRONCHIAL ASTHMA

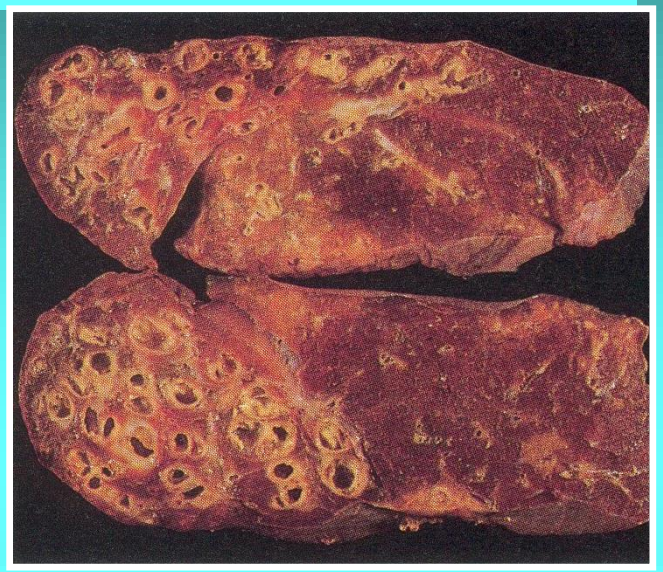


NECROTIZING BRONCHITIS

PATHOLOGY OF TRACHEA AND BRONCHI

BRONCHIECTASES





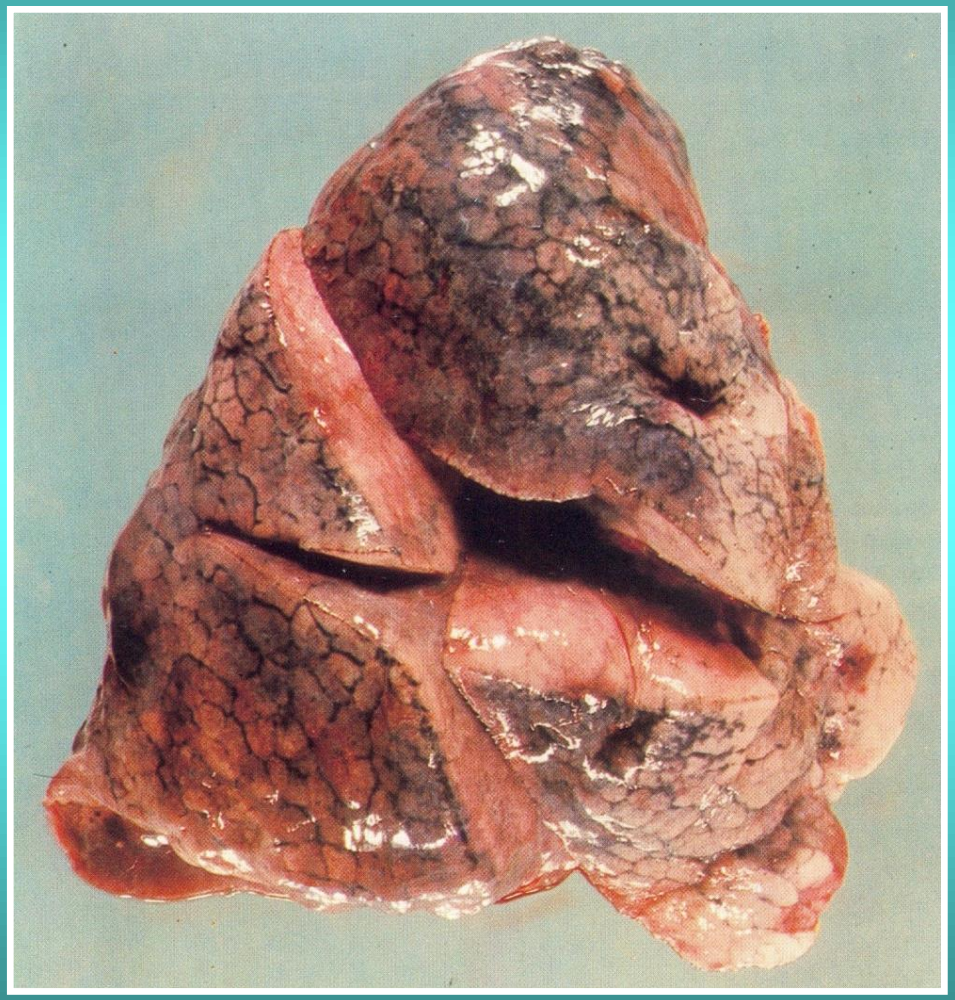
SACCIFORM OR CYLINDRICAL

ETIOLOGY – E TRACTIONE (TRACTION)
OR – E PULSIONE (EXTRUSION)

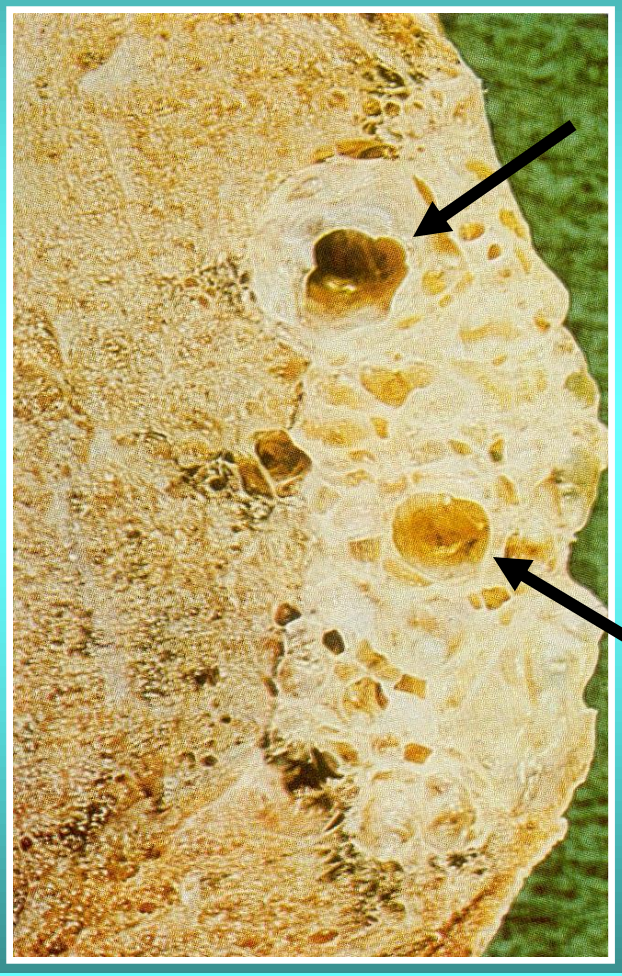
ACCOMPANIED BY INFLAMMATION OF BRONCHI , USUALLY PURULENT → CHRONIC BRONCHITIS

LUNG PATHOLOGY

DEVELOPMENTAL DISTURBANCES

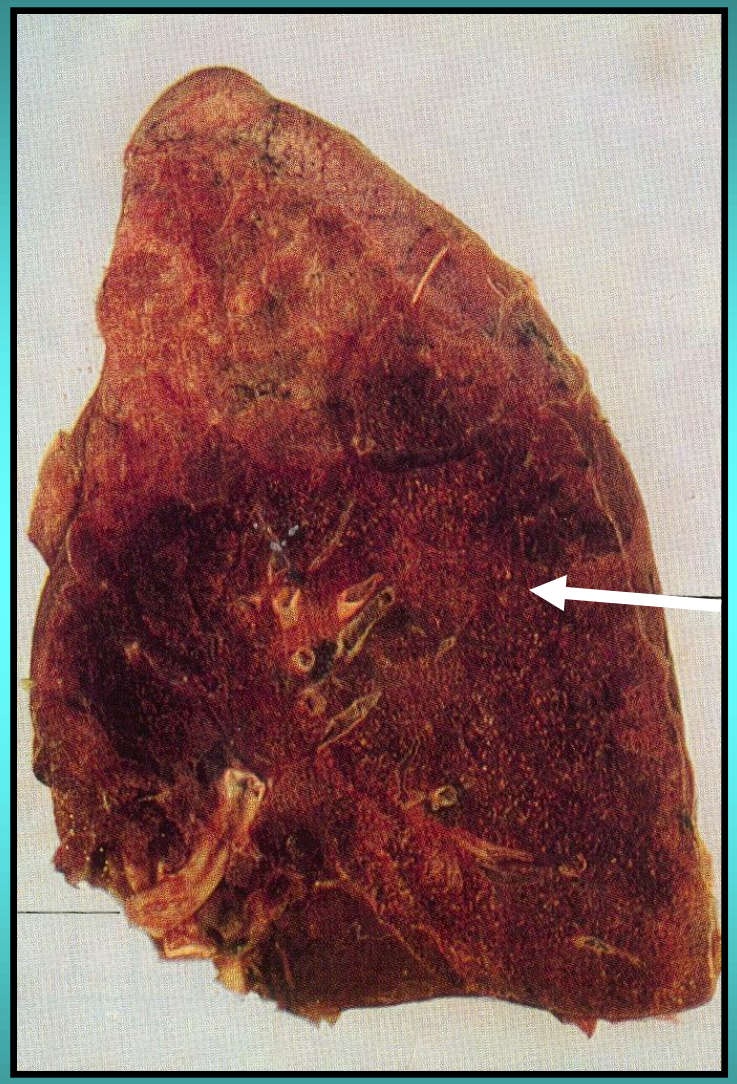


ADDITIONAL LOBES IN LUNG

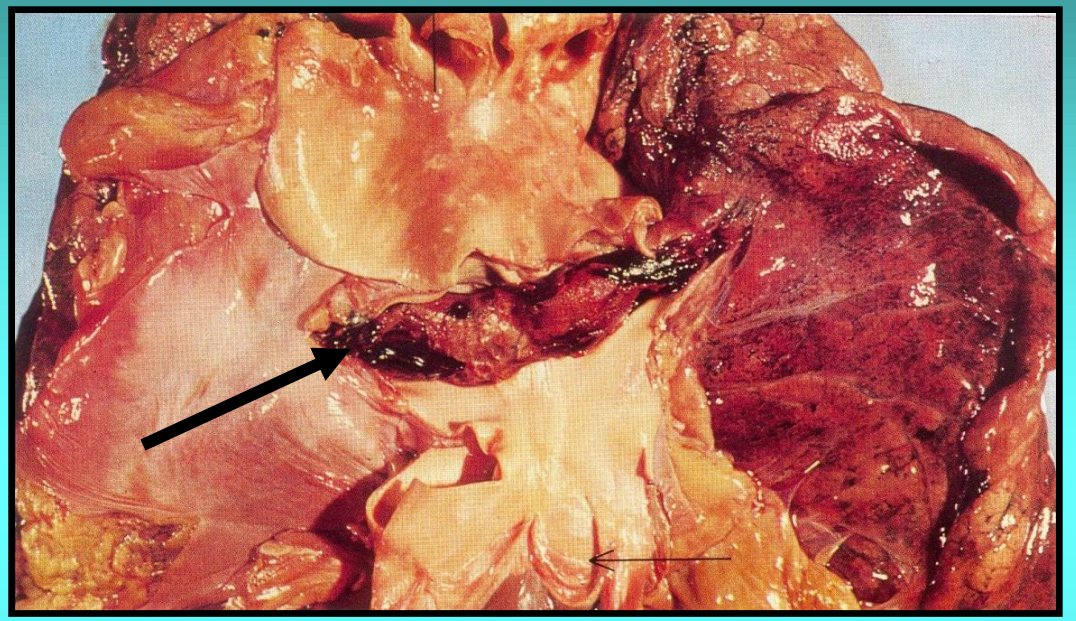


CYSTIC LUNG (CONGENITAL BRONCHIECTASES)

LUNG PATHOLOGY

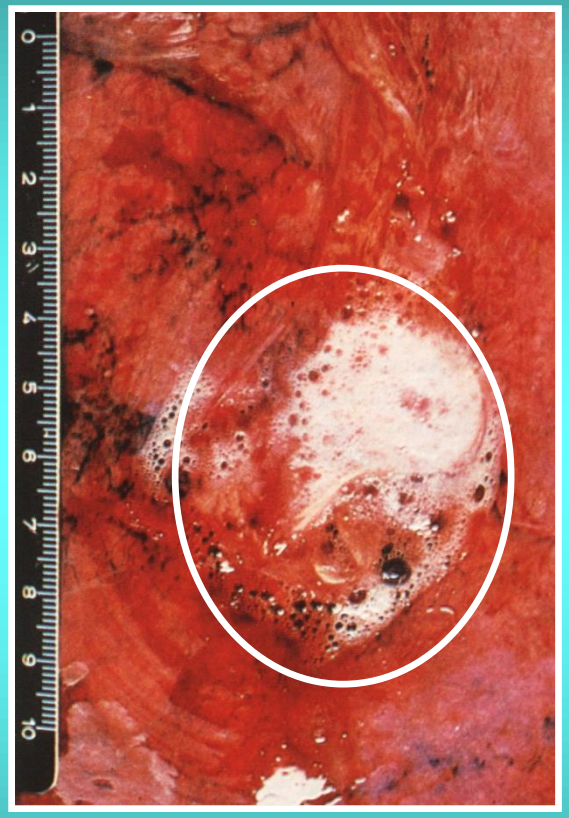


INFARCTUS HAEMORRHAGICUS – HEMORRHAGIC INFARCT

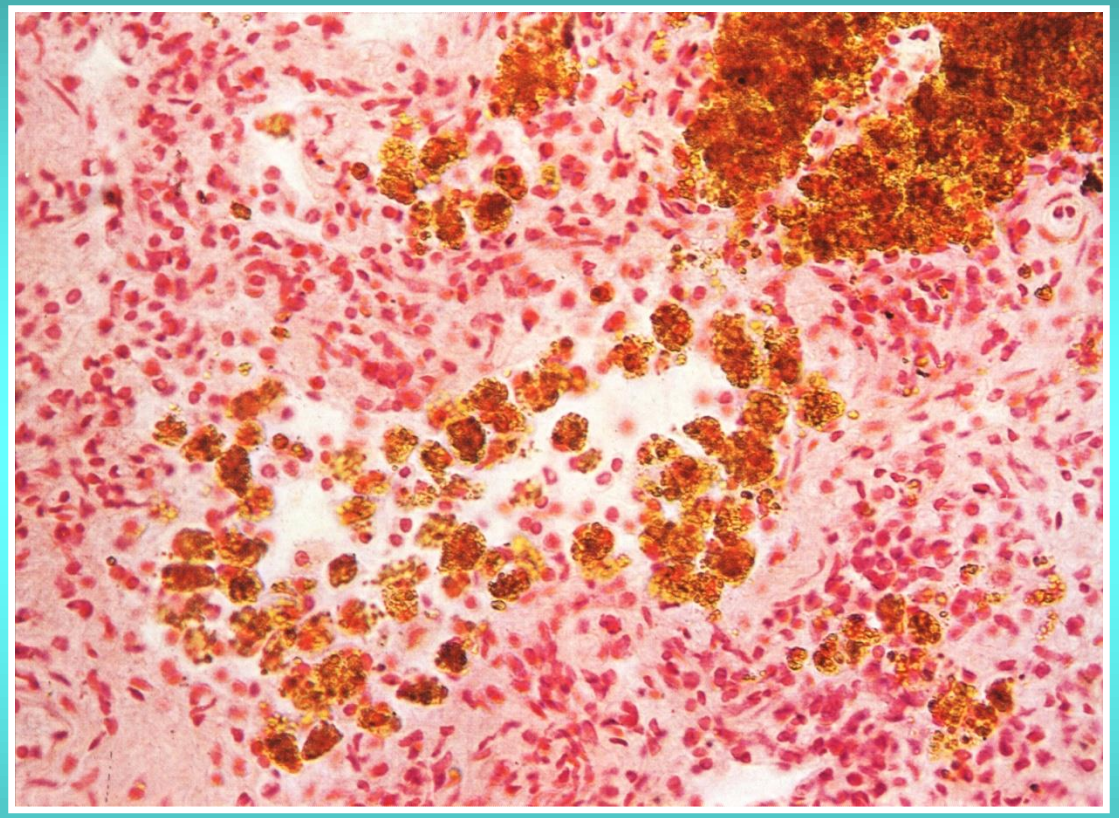


THROMBOSIS IN PULMONARY ARTERY

VENOSTASIS IN LUNGS



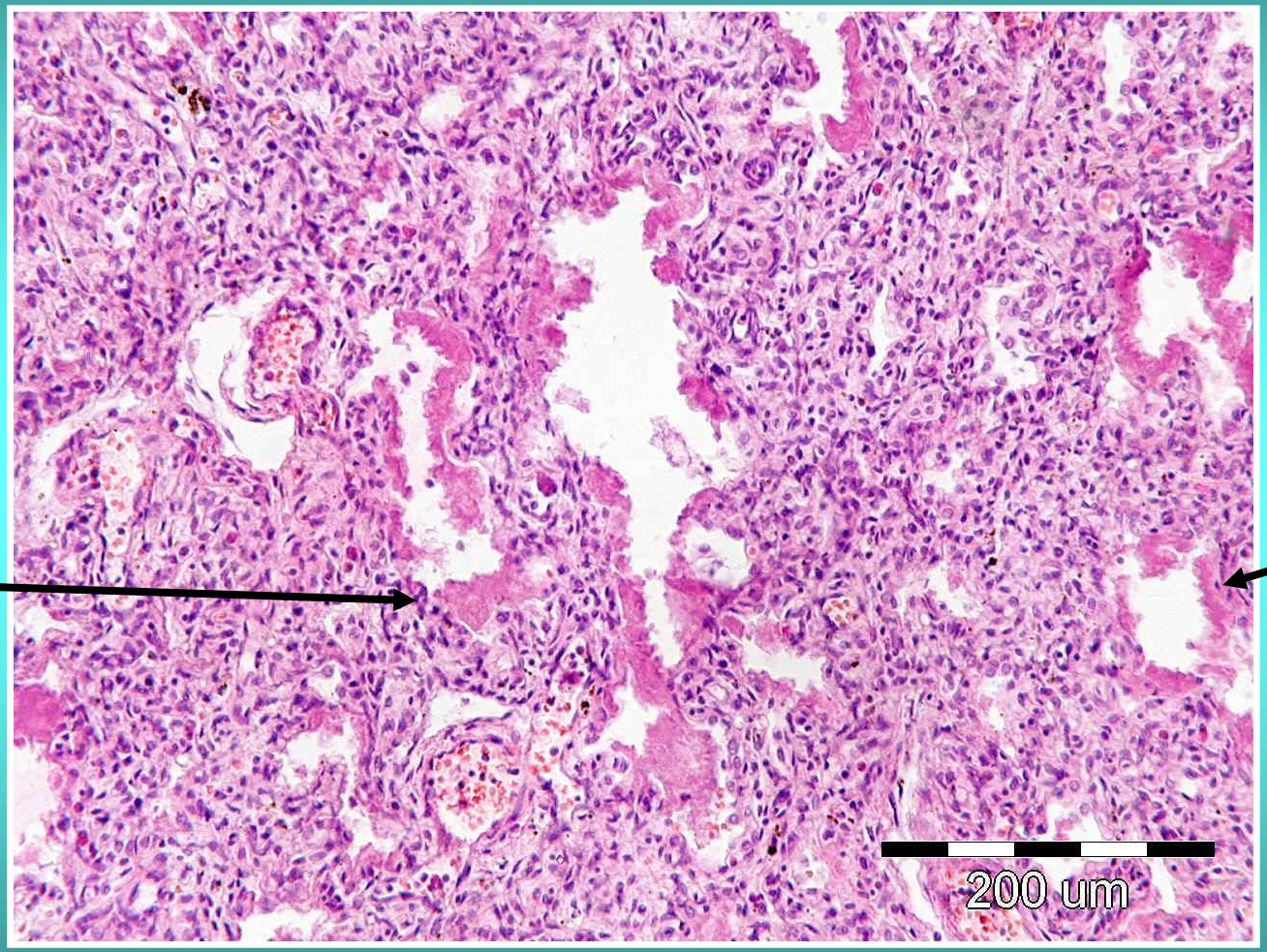
PULMONARY EDEMA – OCCURS IN ACUTE LEFT VENTRICLE INSUFFICIENCY



CHRONIC VENOSTASIS – CYANOTIC INDURATION OF LUNG

DISTURBANCE IN THE AIRINESS OF THE LUNGS

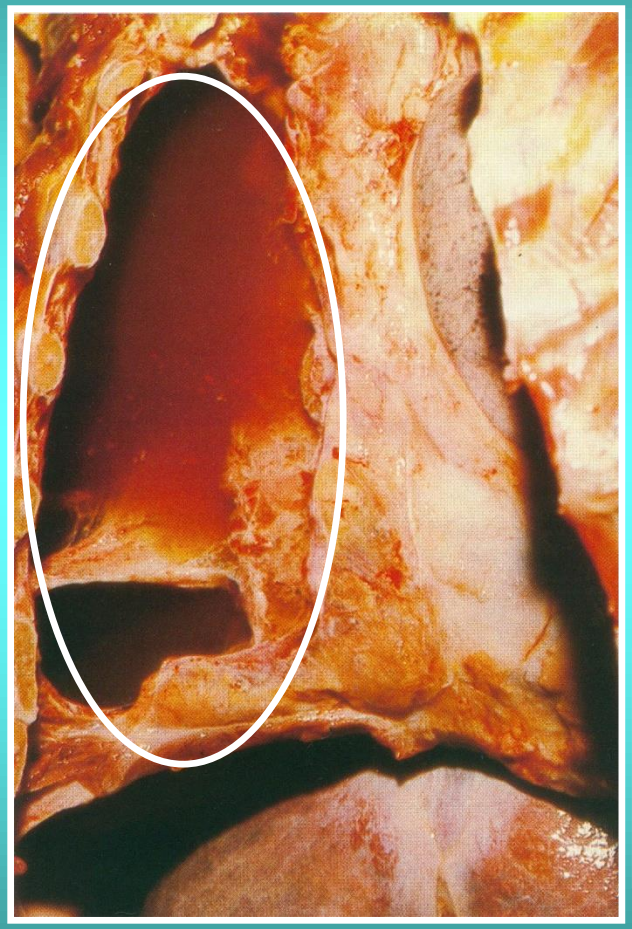
ATELECTASIS



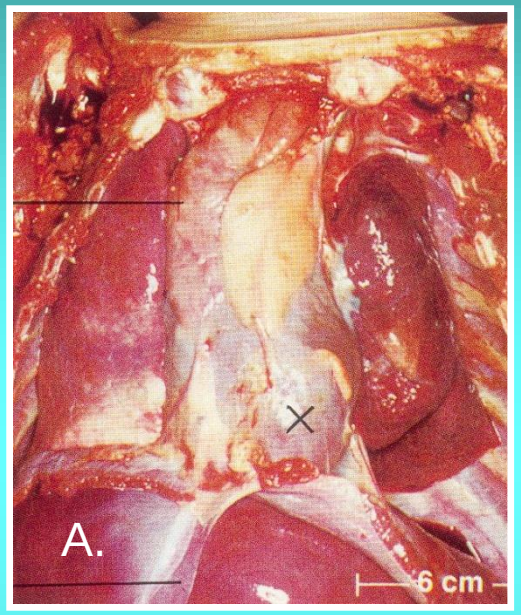
CONGENITAL ATELECTASIS. HYALINE MEMBRANES.
„RESPIRATORY DISTRESS SYNDROME - RDS”

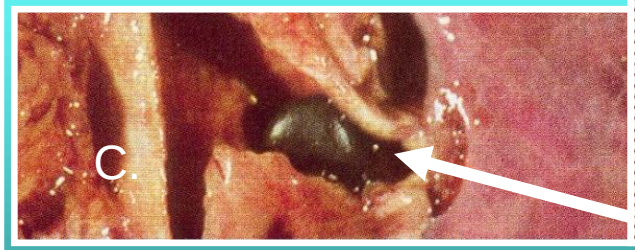
DISTURBANCES IN THE AIRINESS OF THE LUNGS

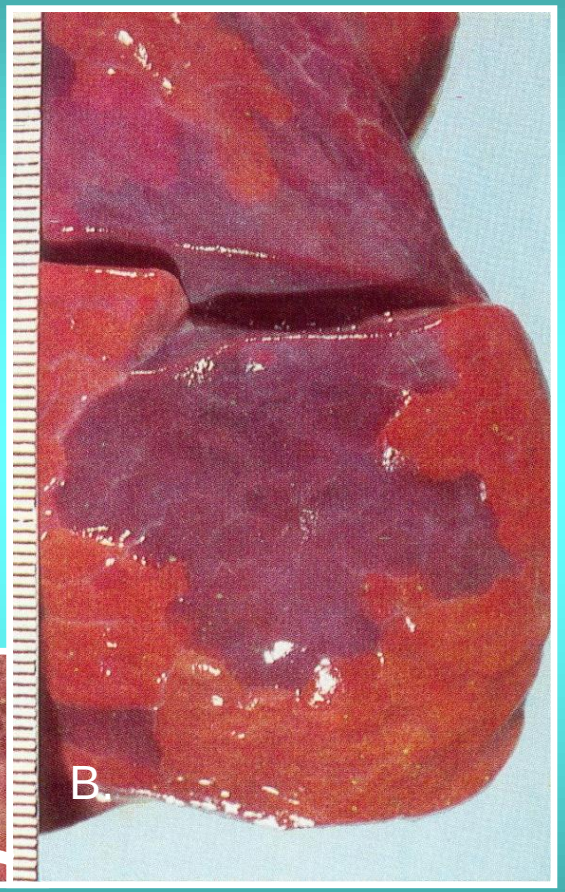
ATELECTASIS



COMPRESSION ATELECTASIS

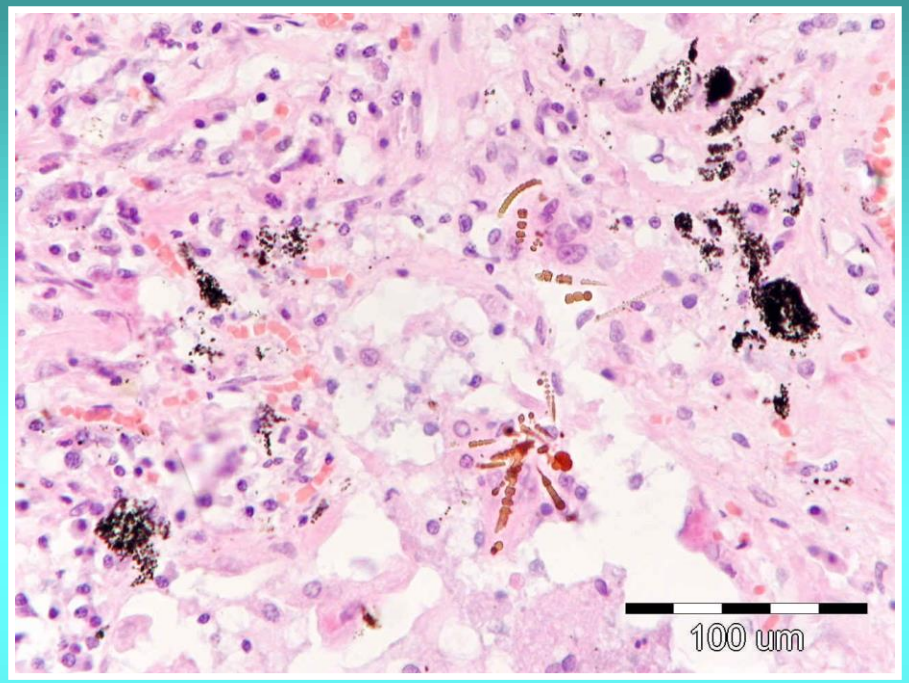






ASPIRATION ATELECTASIS
A. MACROSCOPY. B. FOCI OF ATELECTASIS (DARK) C. CAUSE – OBSTRUCTION OF BRONCHI BY A FOREIGN BODY

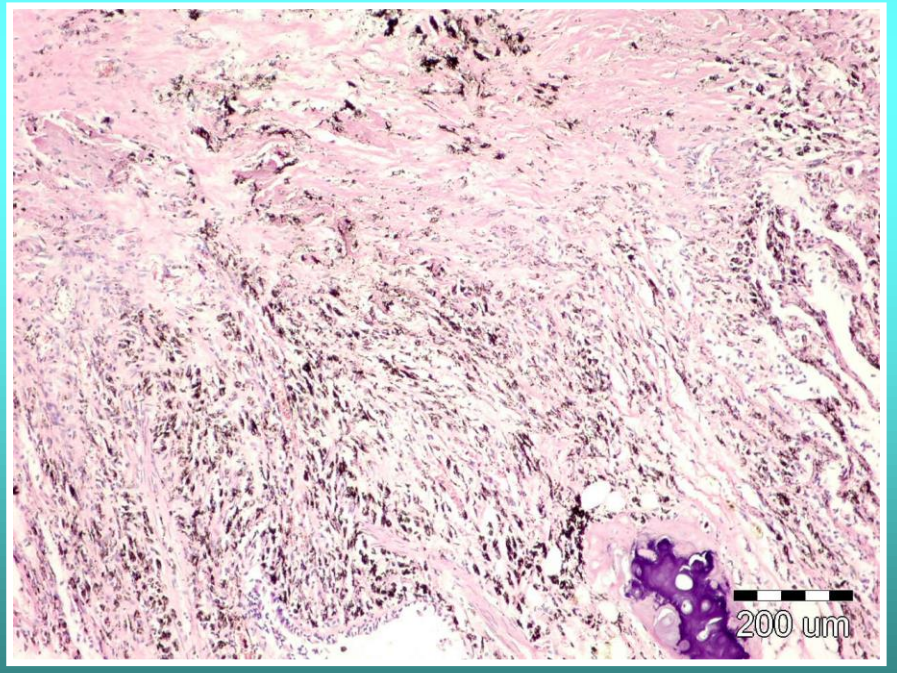
PNEUMOCONIOSES



SILICOANTHRACOSIS

(COAL-MINERS)

ASBESTOSIS



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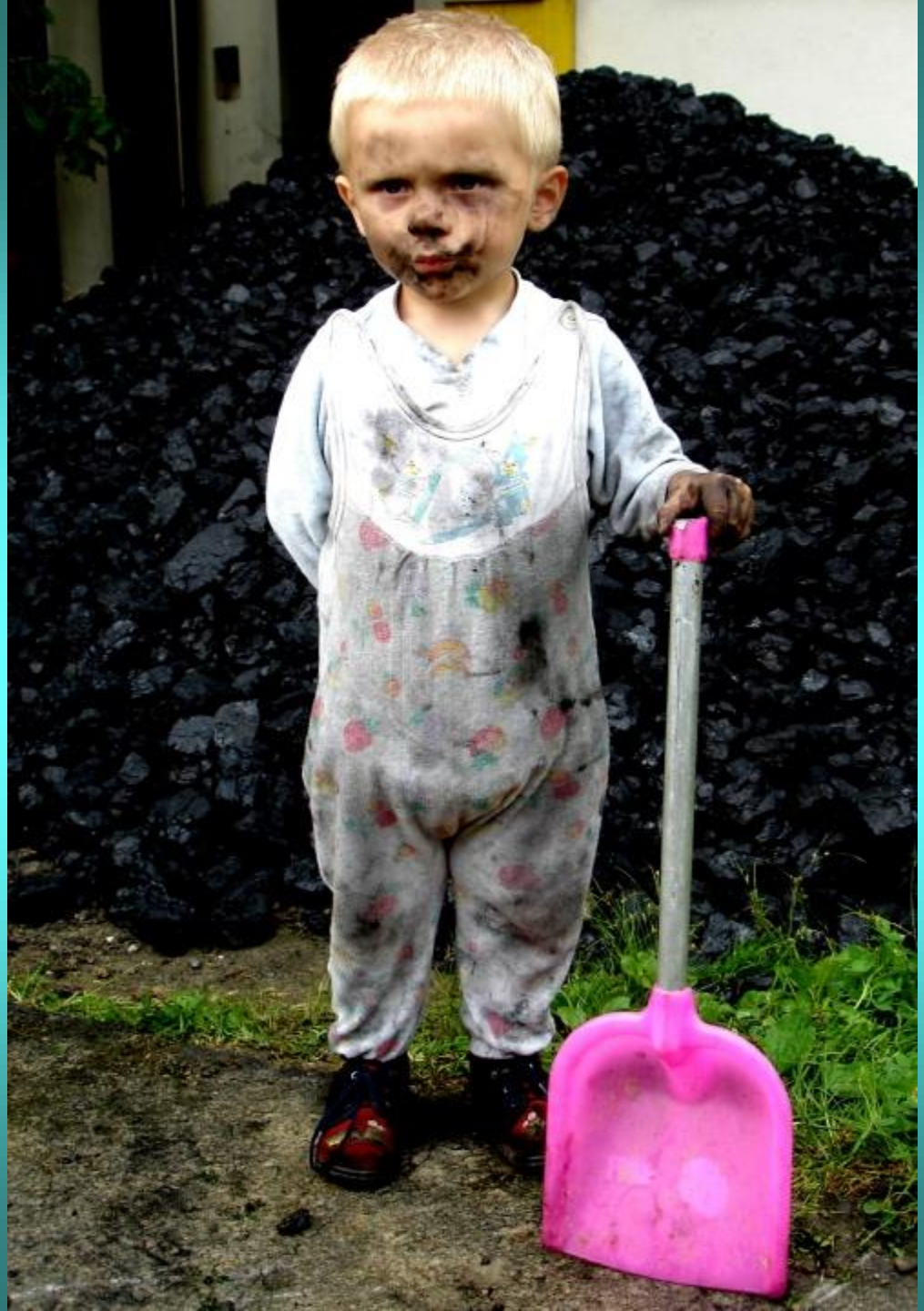


PNEUMONIA

CLASSIFICATION

ANATOMICAL

1. LOBAR PNEUMONIA:
   - A - ALVEOLAR
   - B - INTERSTITIAL
2. LOBULAR, BRONCHOPNEUMONIA:
   - A - ALVEOLAR
   - B - INTERSTITIAL

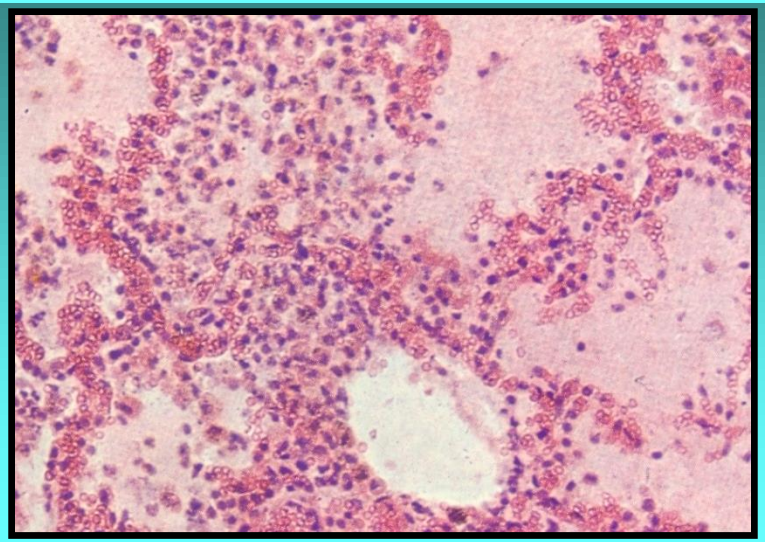
ETIOLOGICAL:

- BACTERIAL
- VIRAL
- FUNGAL
- PARASITIC
- IMMUNOLOGICAL
- PHYSICOCHEMICAL
- FACTORS

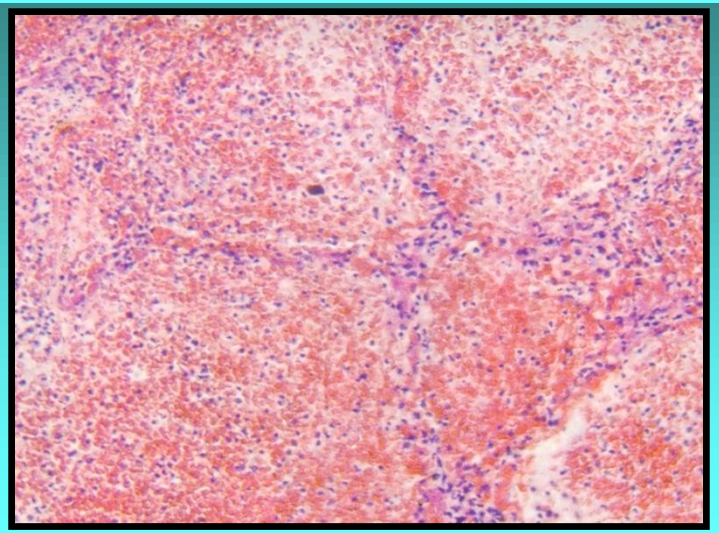
BASED ON MORPHOLOGY

- SEROUS
- CATARRHAL
- FIBROUS
- PURULENT
- HEMORRHAGIC
- GANGRENOUS
- GRANULOMATOUS

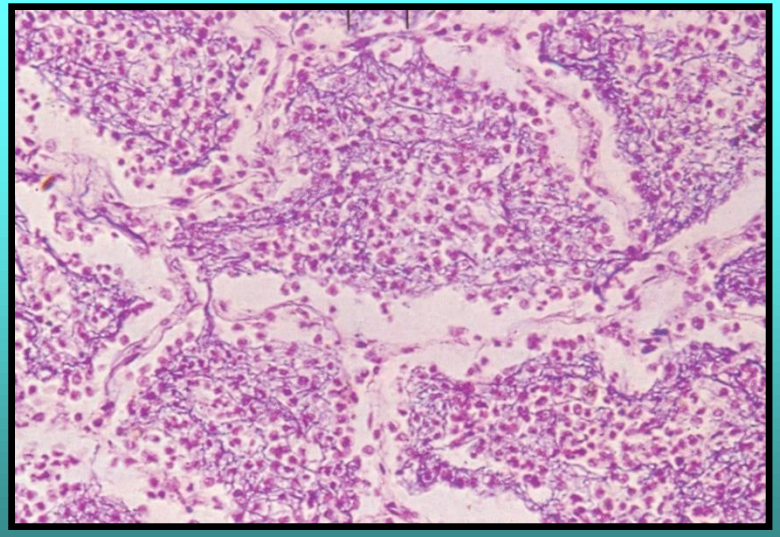
LOBAR PNEUMONIA



CONGESTION



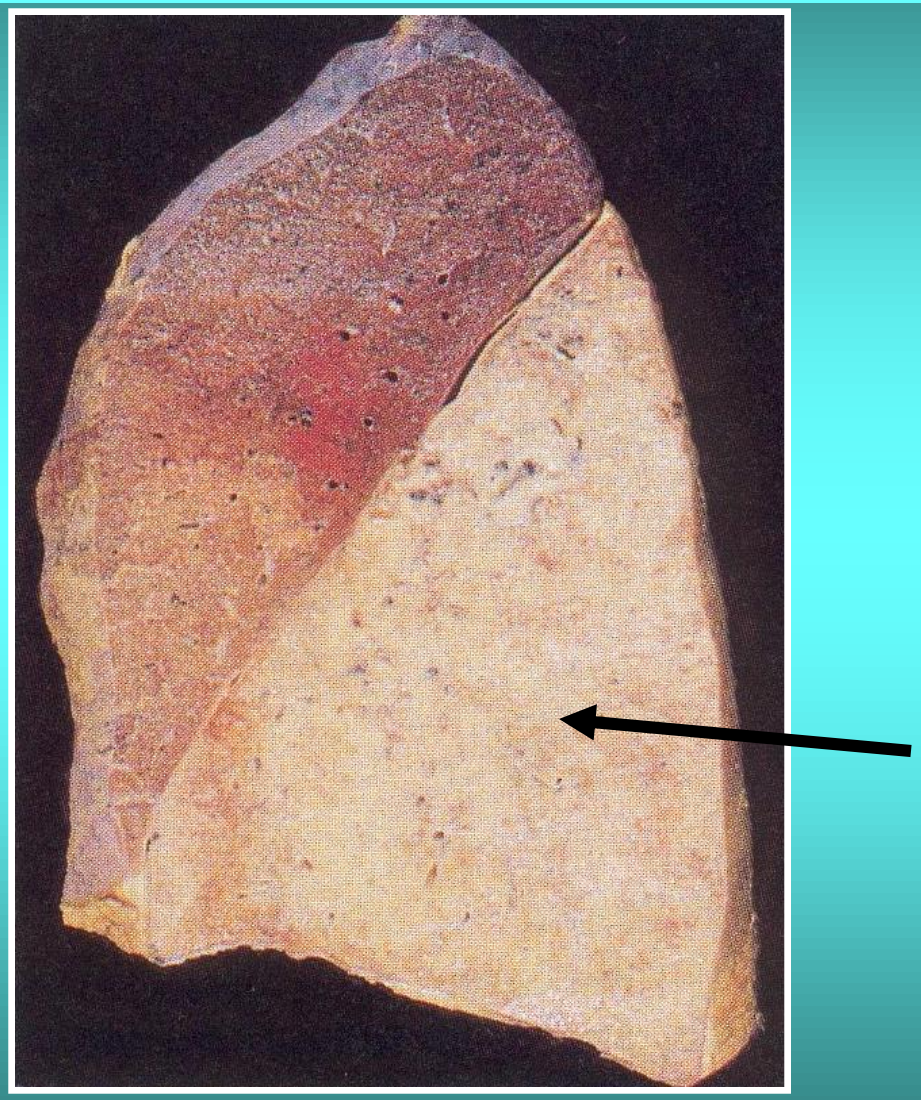
RED HEPATIZATION



GRAY HEPATIZATION

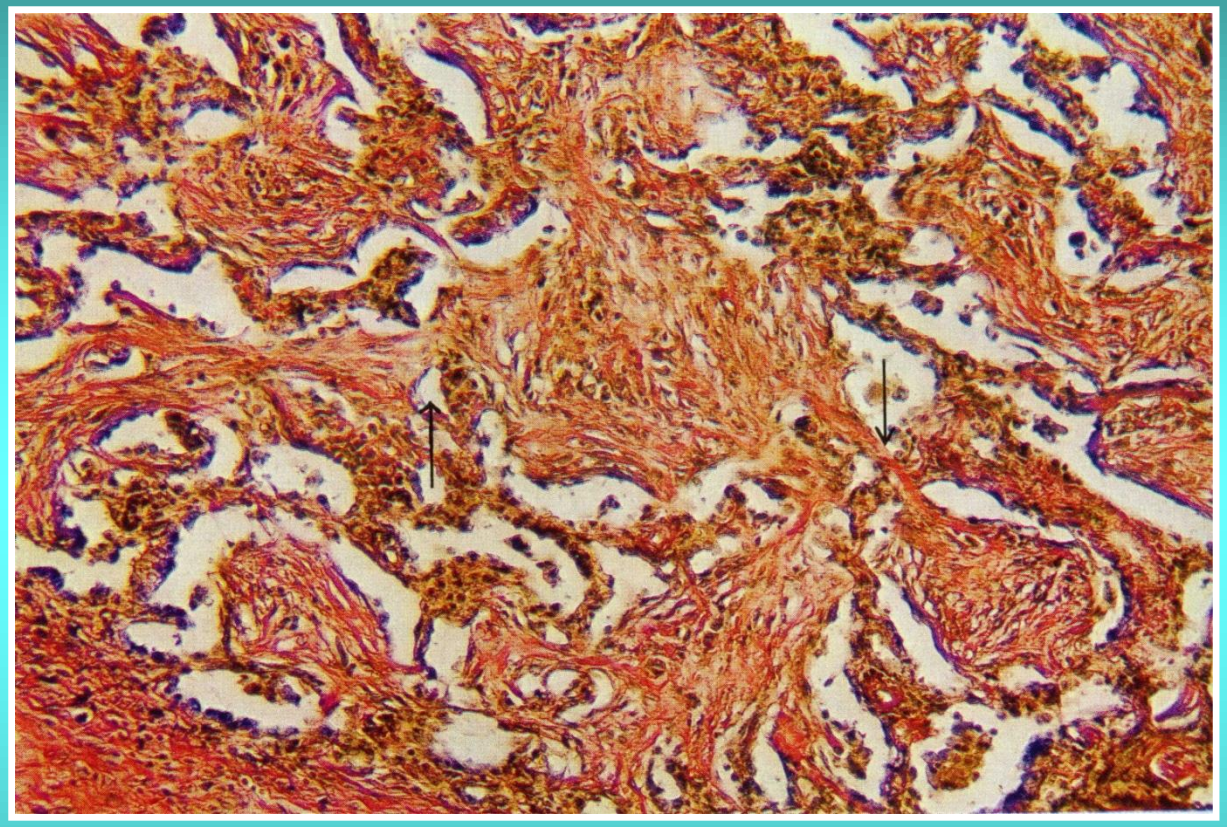
YELLOW HEPATIZATION

(LOBAR *PNEUMONIA, PLEUROPNEUMONIA, CROUPOUS PNEUMONIA*)



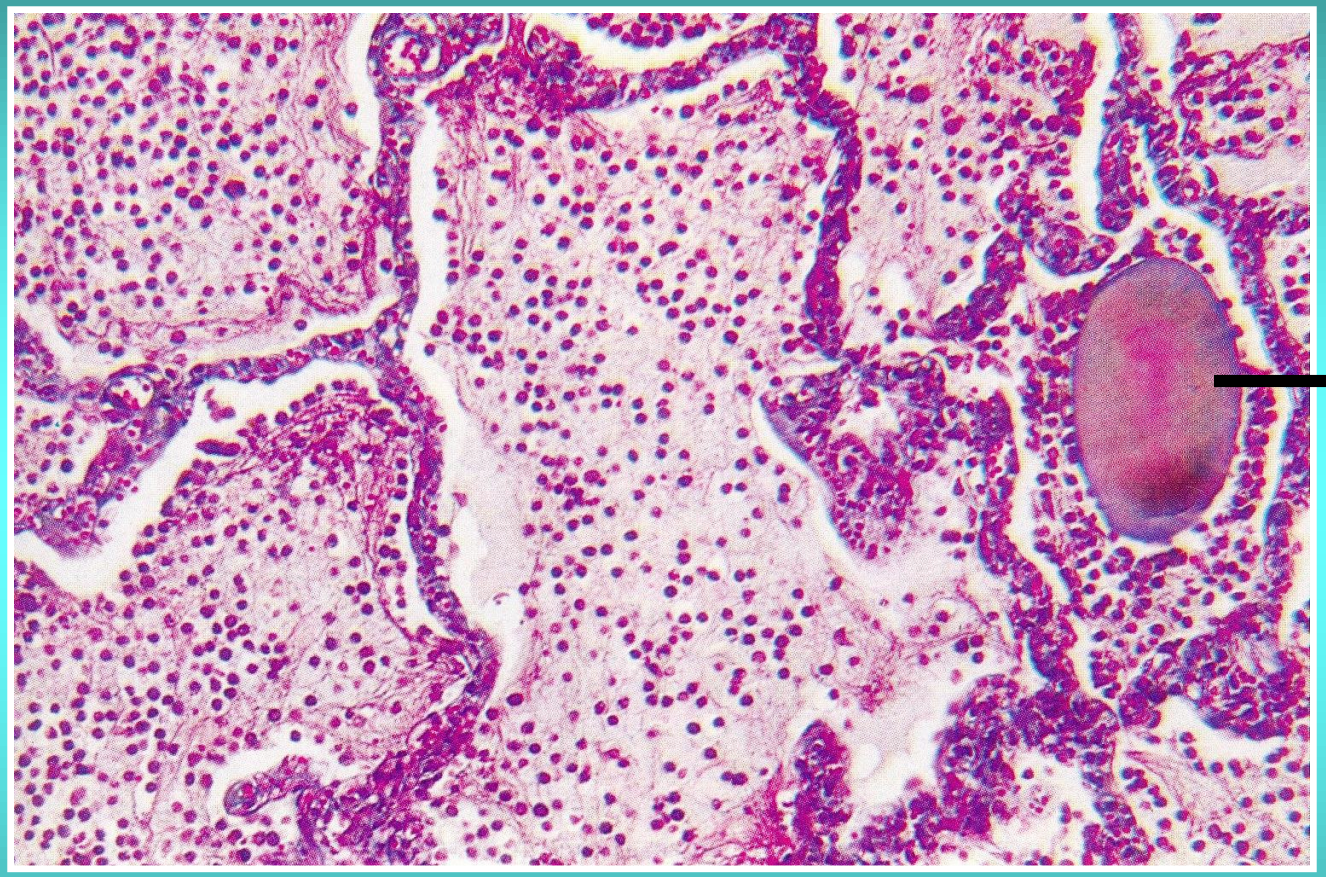
GRAY HEPATIZATION

LOBAR PNEUMONIA

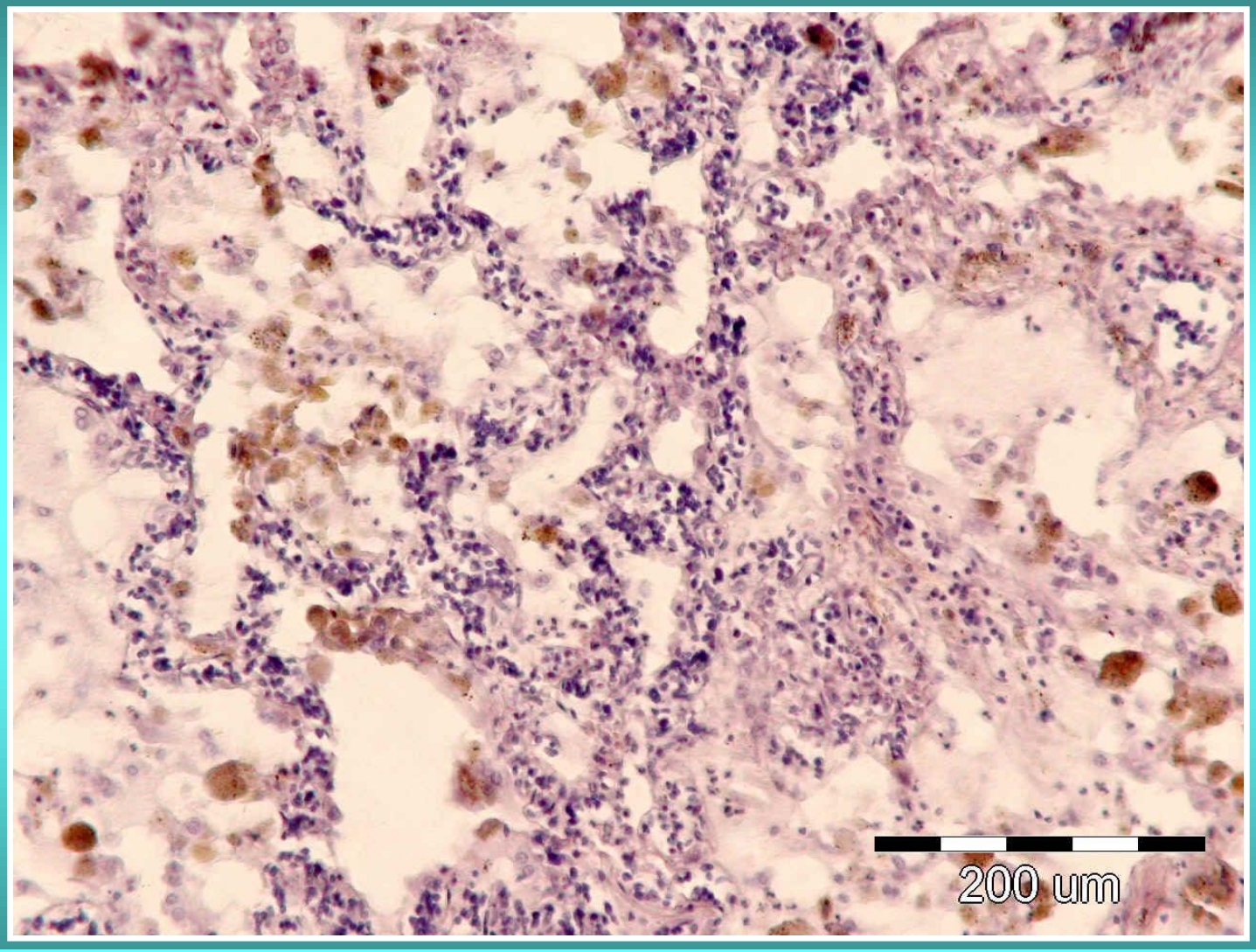


CARNIFICATION (FIBROSIS) OF LUNG AFTER PNEUMONIA

BRONCHOPNEUMONIA, LOBULAR PNEUMONIA

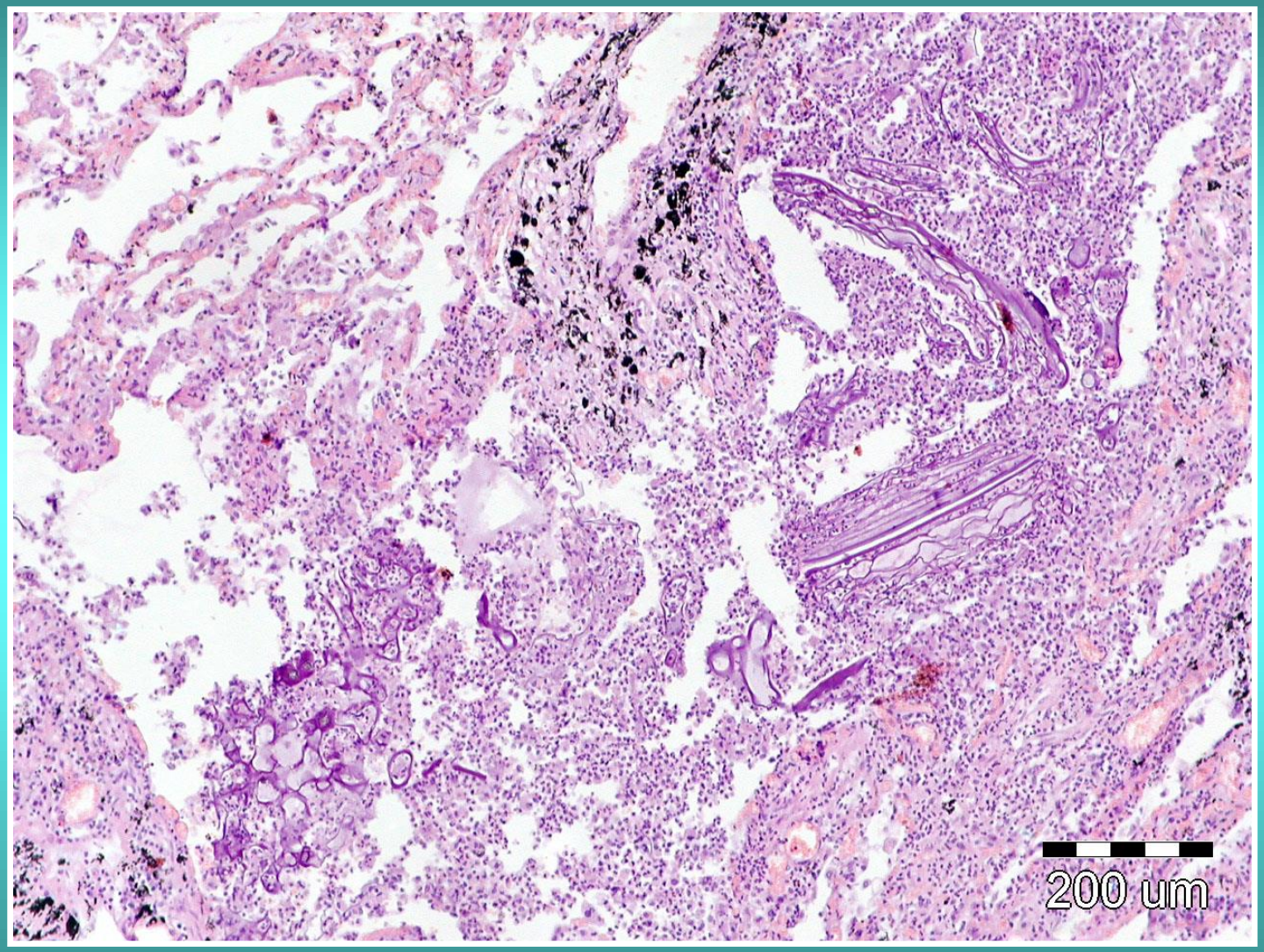


INTERSTITIAL PNEUMONIA



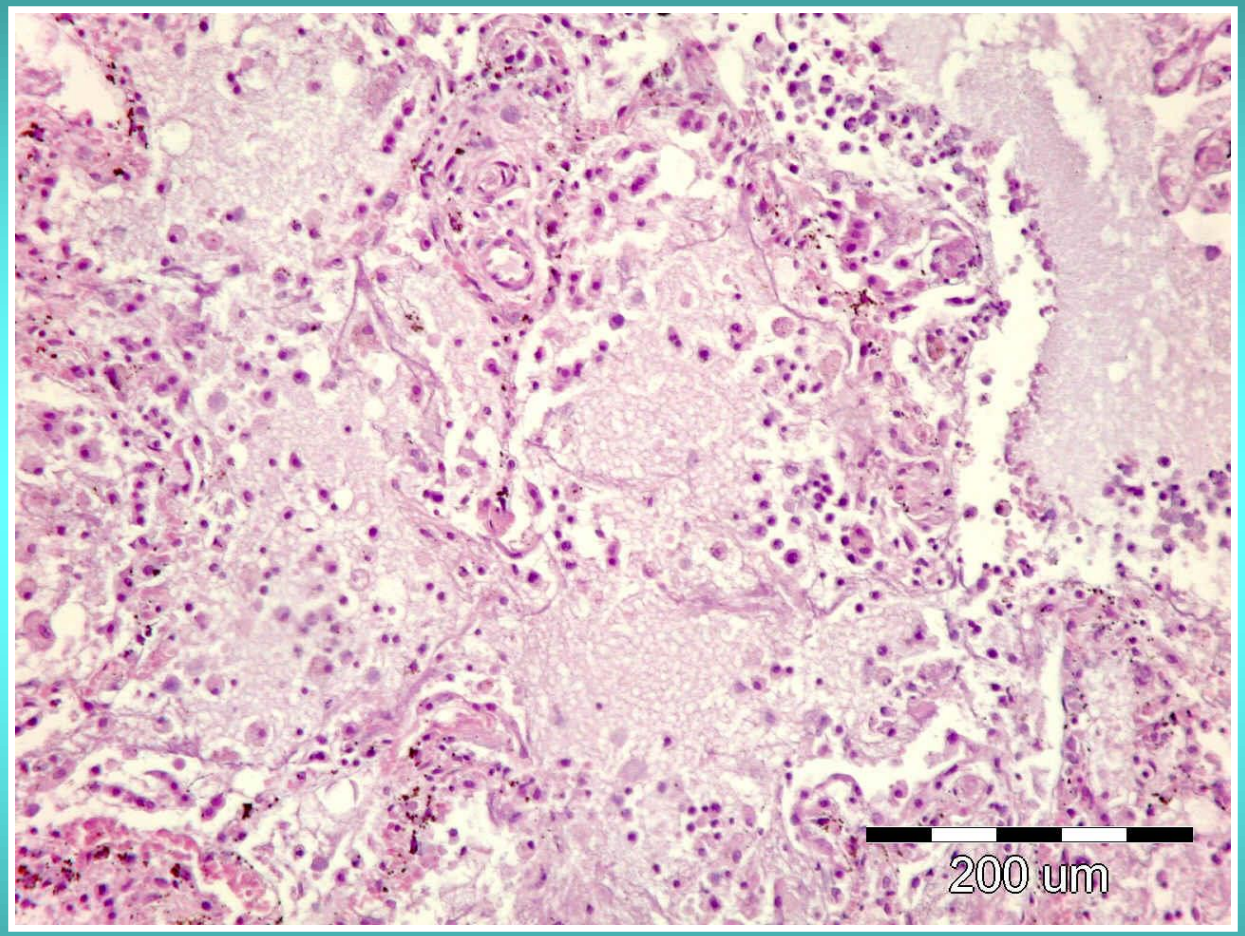
LYMPHOCYTIC INFILTRATION IN ALVEOLI. USUALLY OF VIRAL ETIOLOGY.

FORMS OF PNEUMONIA



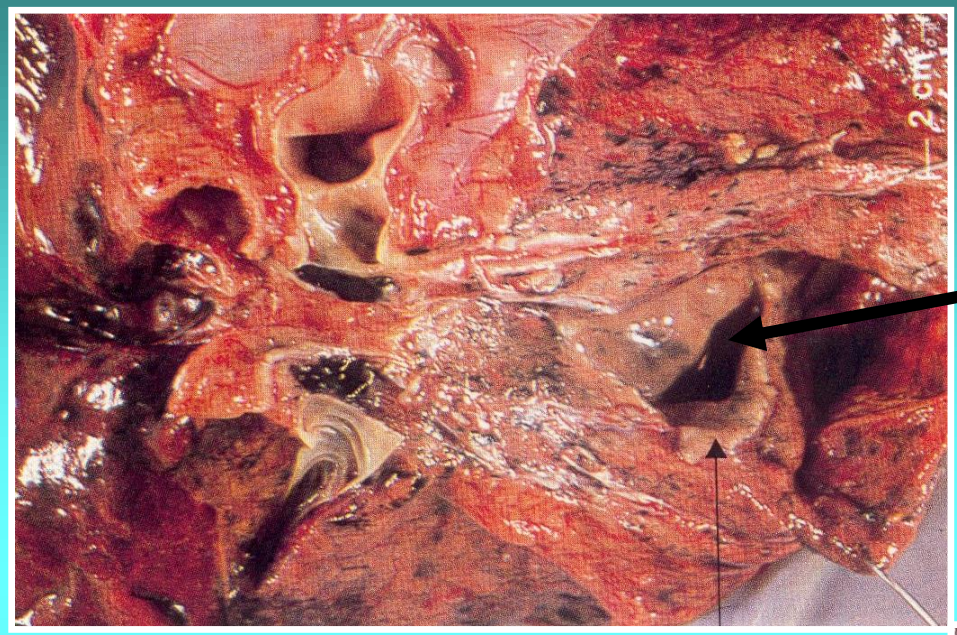
ASPIRATION BRONCHOPNEUMONIA (NUTRIENTS)

PLASMA CELL PNEUMONIA, PNEUMOCYSTIC



INFILTRATIONS OF PLASMA CELLS IN ALVEOLI. CHARACTERISTIC FOAM. ETIOLOGY - *PNEUMOCYSTIS JIROVECII*. OPPORTUNISTIC INFECTION USUALLY IN AIDS PATIENTS

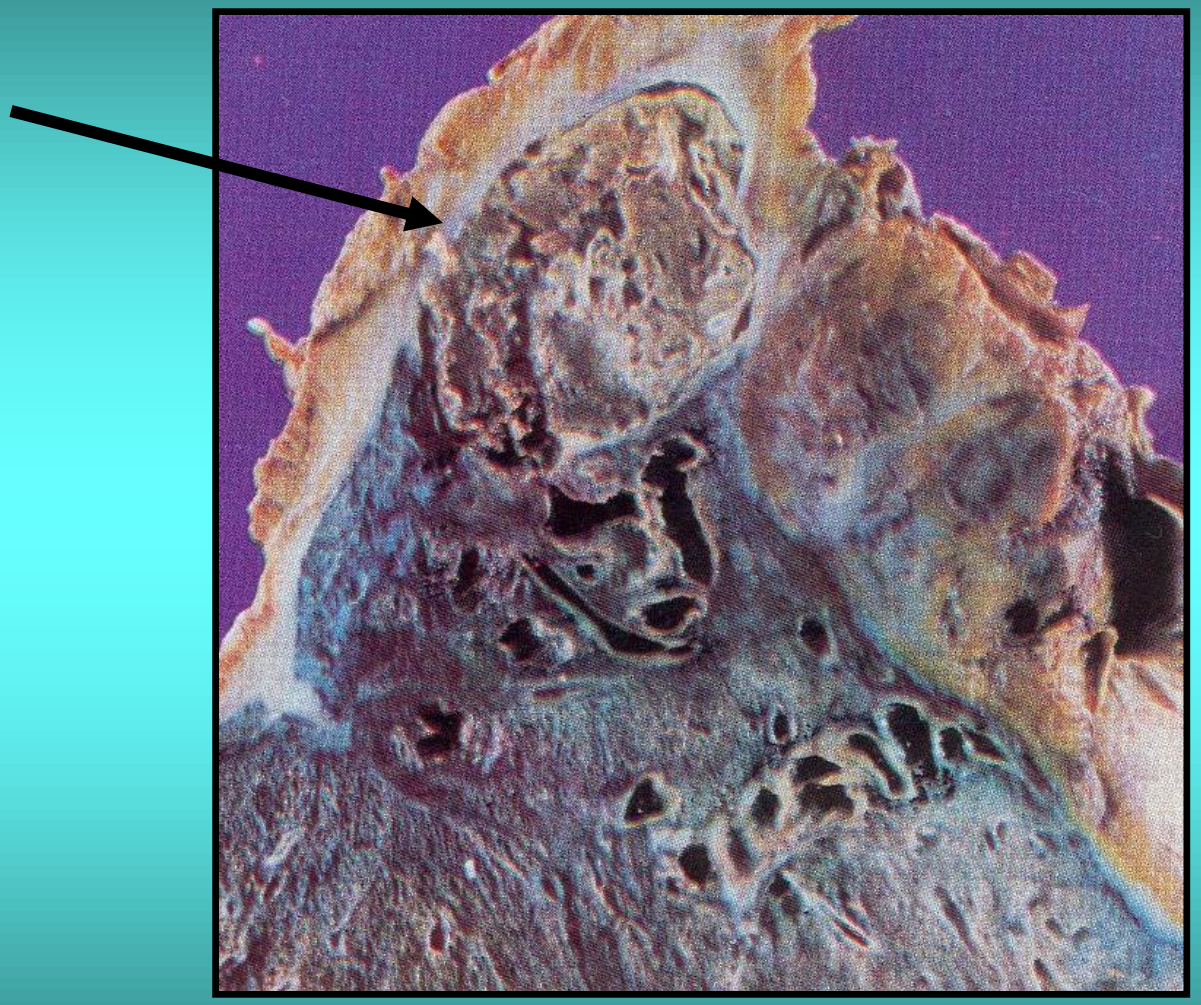
PURULENT INFECTIONS OF LUNGS



ABSCESS AFTER PNEUMONIA SINGLE OR NUMEROUS

METASTATIC ABSCESS

LUNG PATHOLOGY



ASPERGILLOMA (IN OLD TUBERCULOSIS)

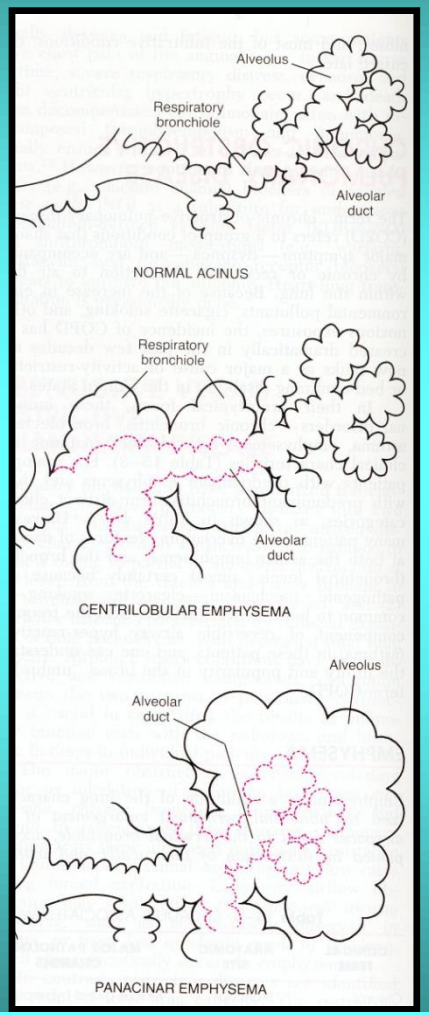
EMPHYSEMA

CONDITION OF THE LUNGS CHARACTERIZED BY INCREASE BEYOND NORMAL IN THE SIZE OF AIR SPACES DISTAL TO THE TERMINAL BRONCHIOLES EITHER FROM DILATATION OF THE ALVEOLI OR FROM DESTRUCTION OF THEIR WALLS

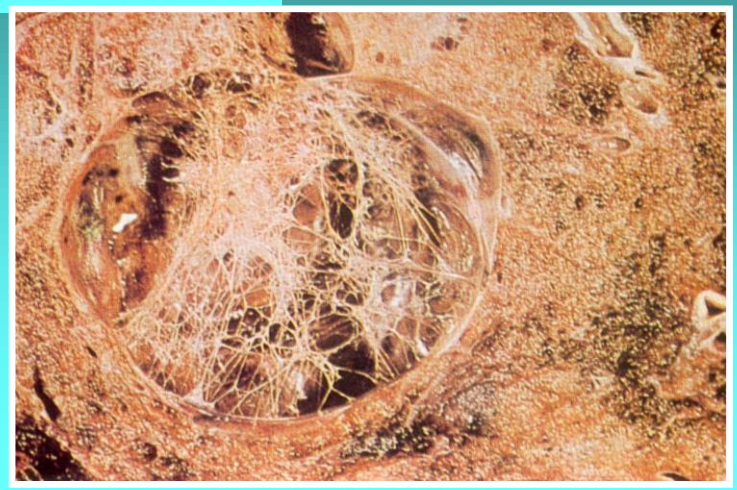
DISTURBANCES IN THE AIRINESS OF THE LUNGS

EMPHYSEMA

BULLOUS EMPHYSEMA



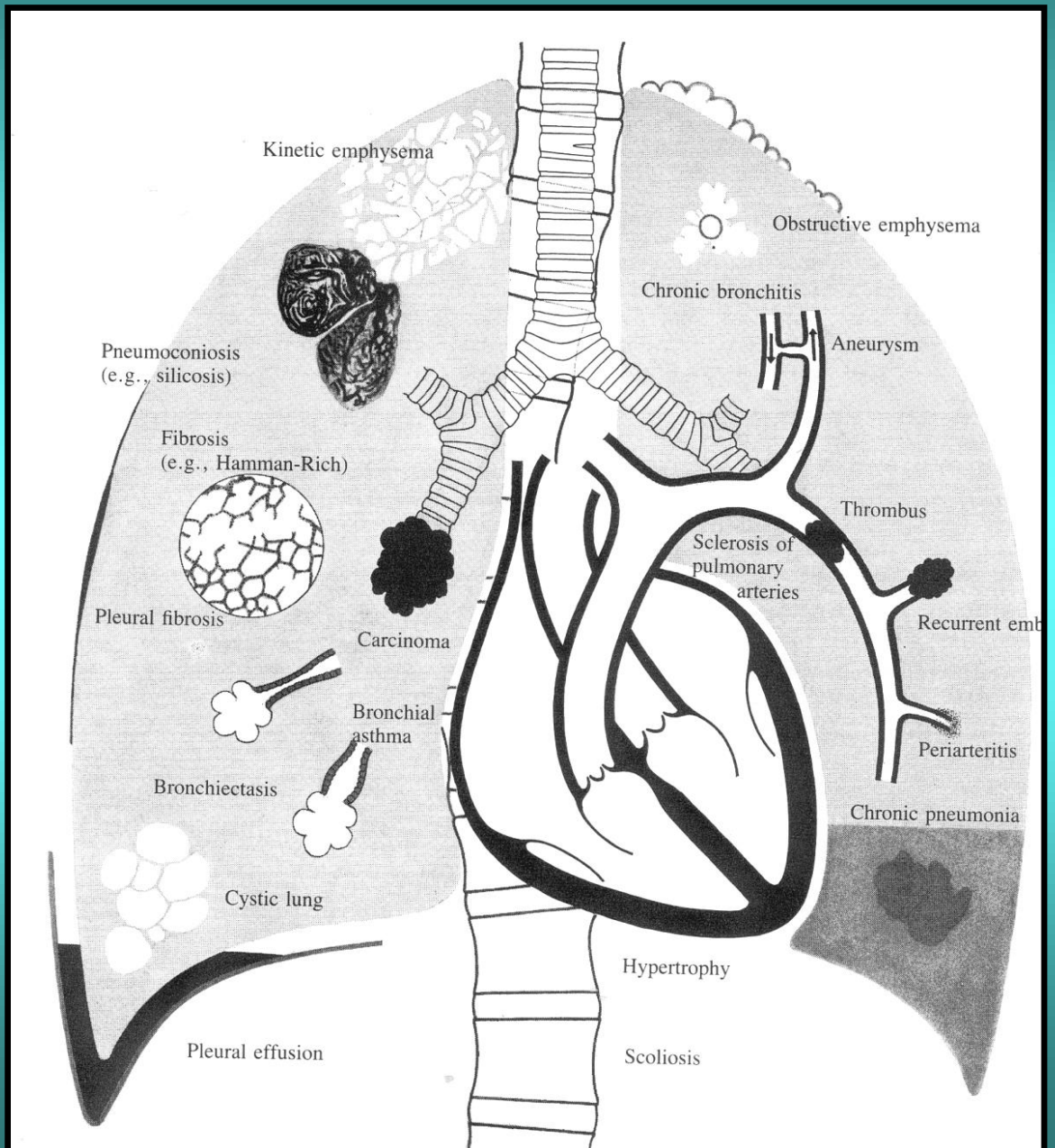
SCHEME OF LOCALISATIONS OF EMPHYSEMA



OBTURATORY EMPHYSEMA

MARGINAL EMPHYSEMA

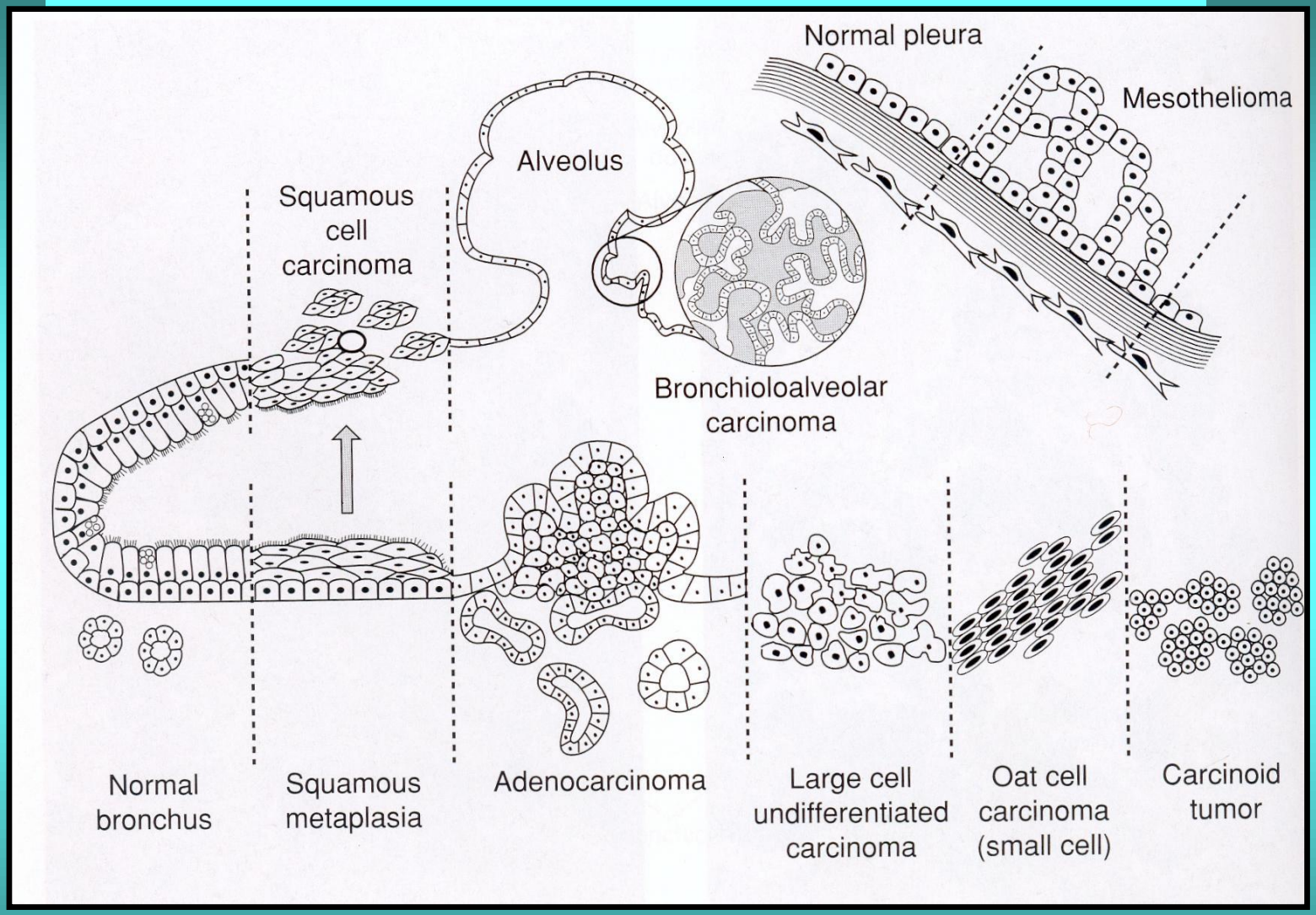
LUNG PATHOLOGY



PULMONARY HEART

CAUSES

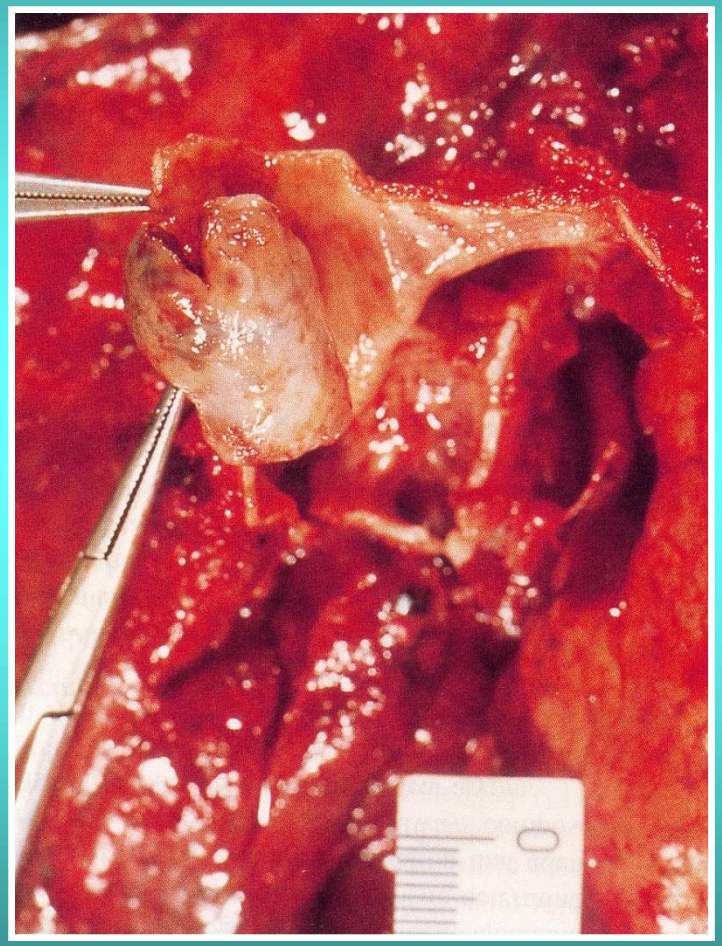
TUMORS OF LUNGS

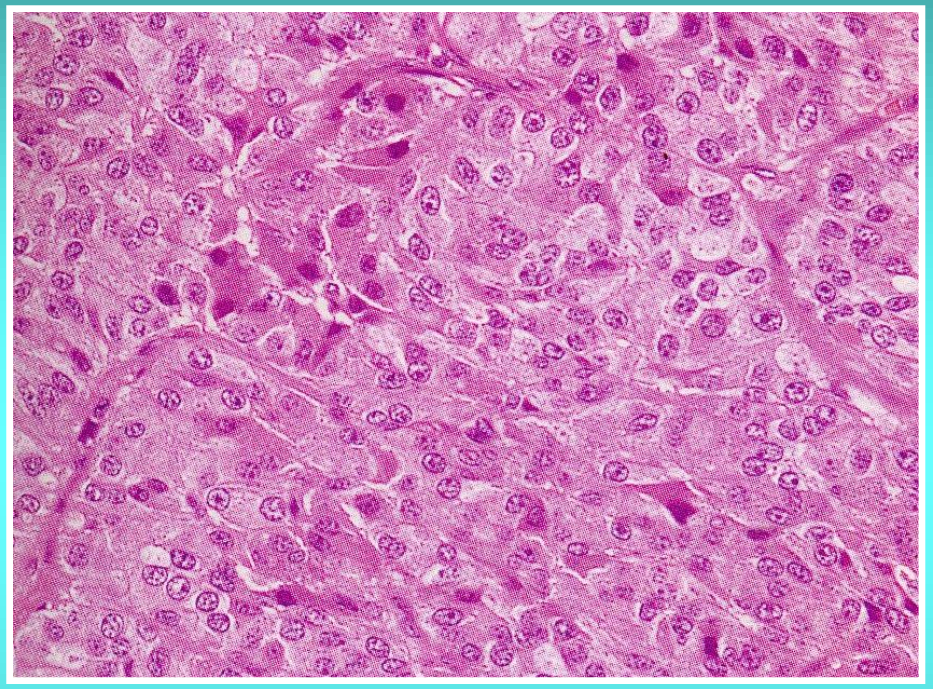


HISTOGENESIS OF LUNG CANCER

TUMORS OF LUNGS

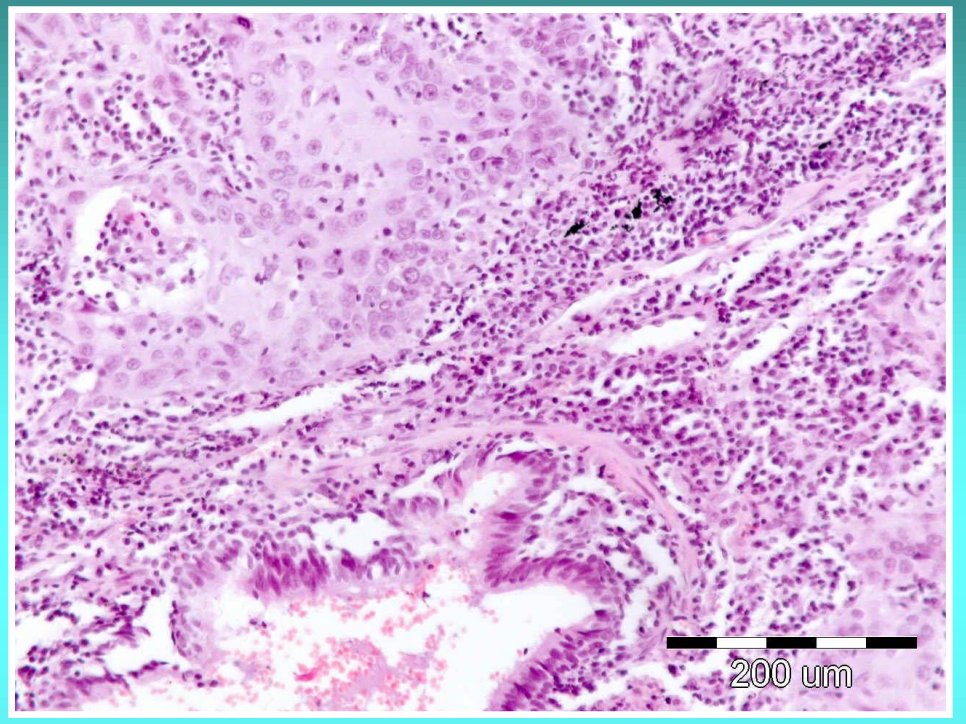
BRONCHIAL CARCINOID





APPROX 2% OF LUNG TUMORS; ORIGIN: NEUROENDOCRINE CELLS. INFILTRATIVE GROWTH, LATE METASTASES

TUMORS OF LUNGS



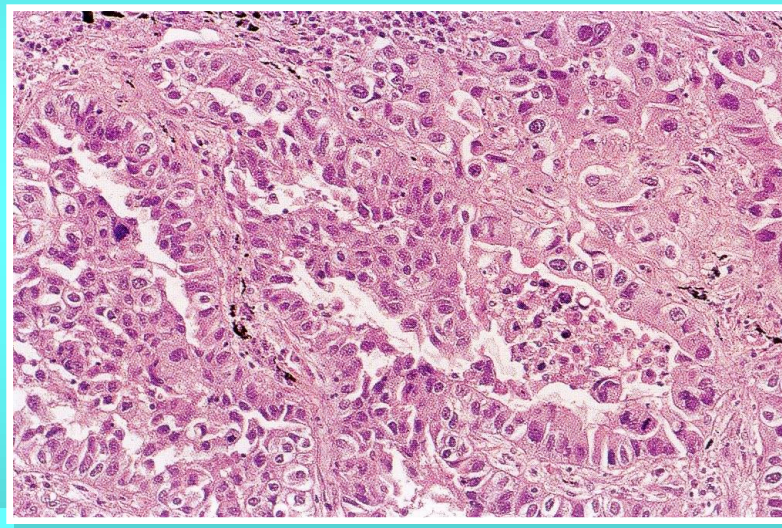
SQUAMOUS CELL CARCINOMA

ETIOLOGY: CIGARETTE SMOKING


Marlboro
Marlboro
LIGHTS

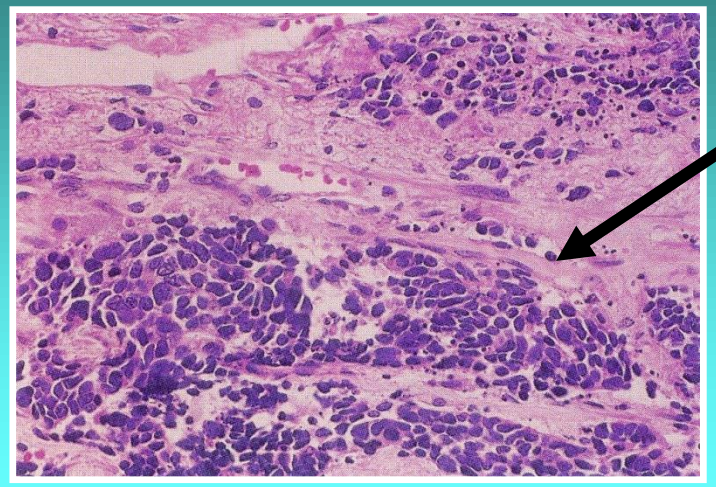
TUMORS OF LUNGS

ADENOCARCINOMA

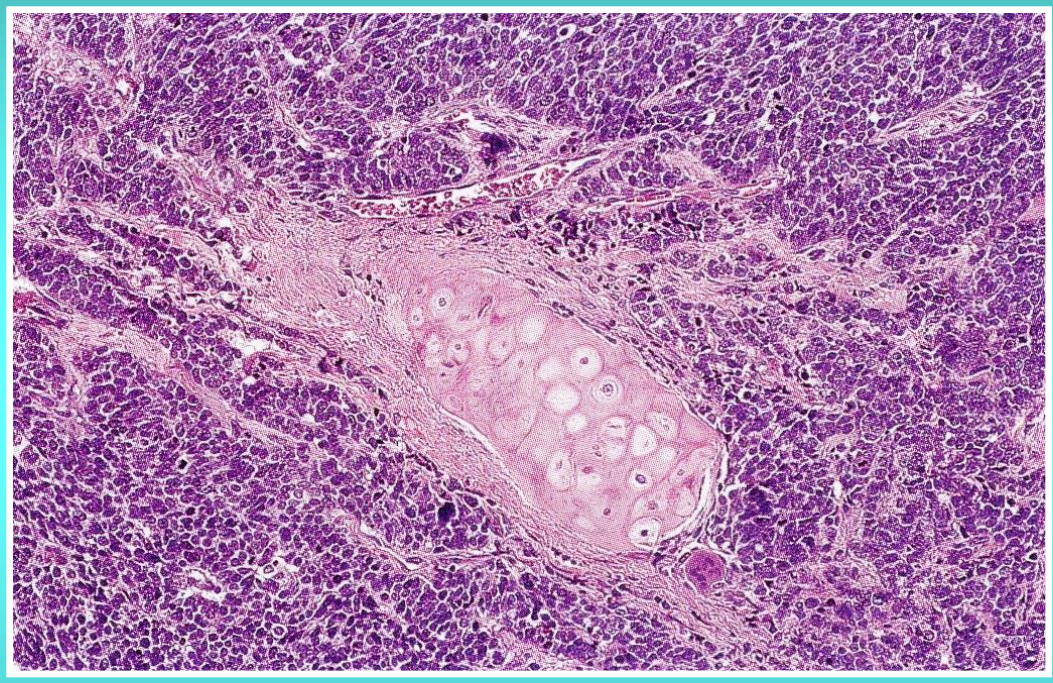


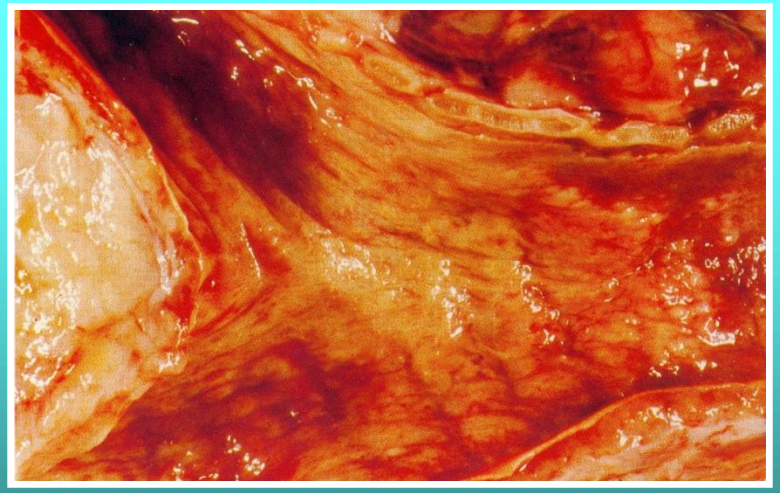
25-40% OF LUNG CANCERS. COMMON IN NON-SMOKING WOMEN !!

TUMORS OF LUNGS



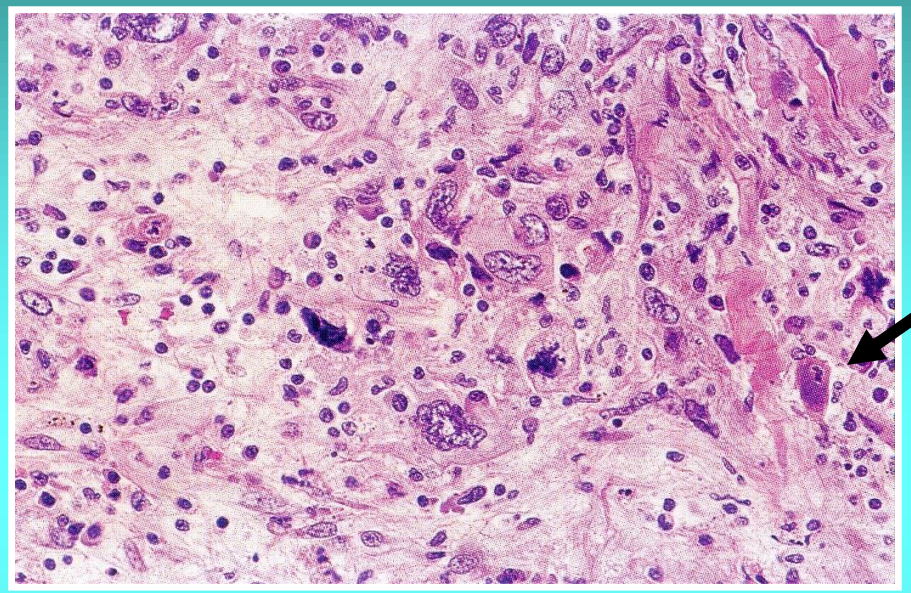
ANAPLASTIC CARCINOMA (PARVICELLULAR)





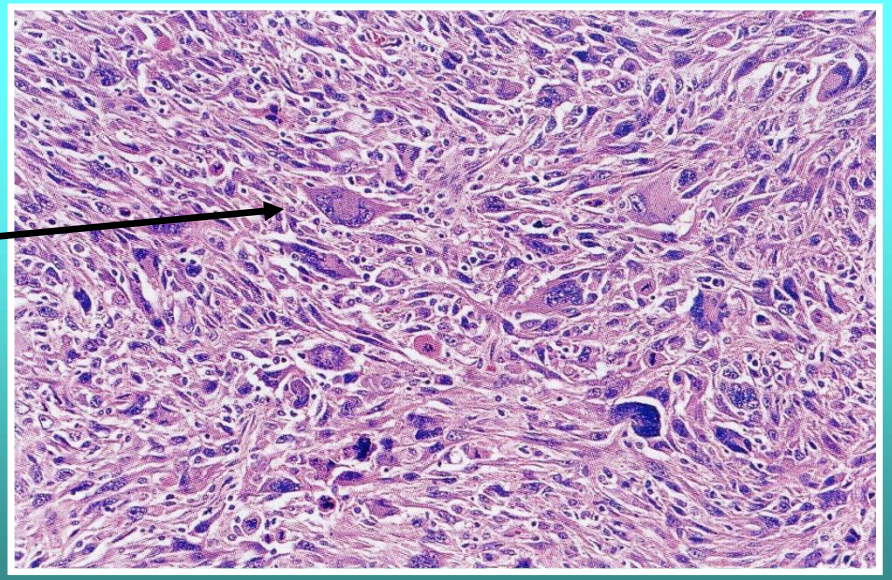
EXTREMELY MALIGNANT. USUALLY IN SMOKERS; SUSCEPTIBLE TO RADIATION

TUMORS OF LUNGS



ANAPLASTIC CARCINOMA (MACROCELLULAR)

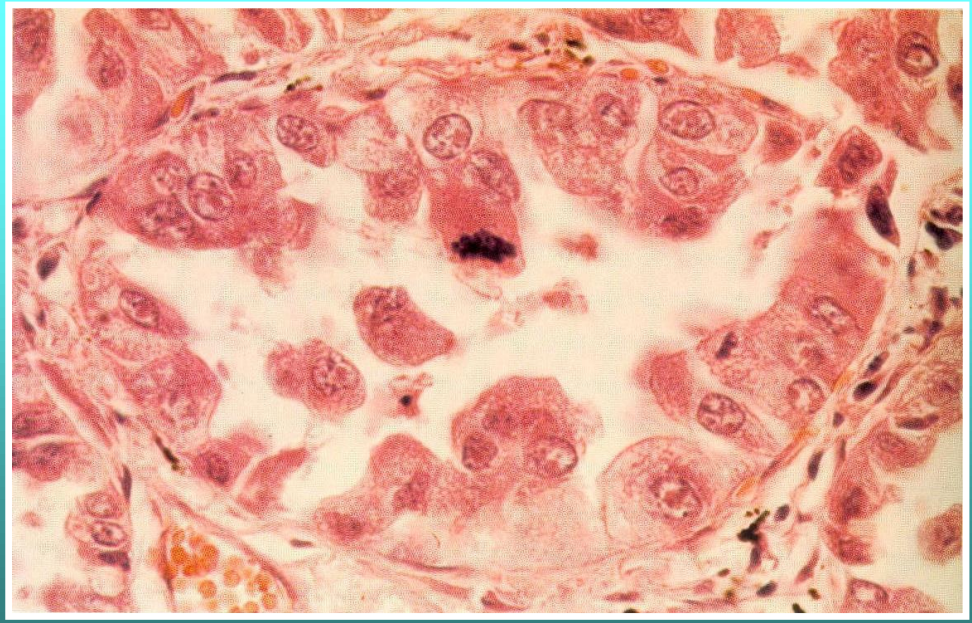
LARGE POLYGONAL CELLS



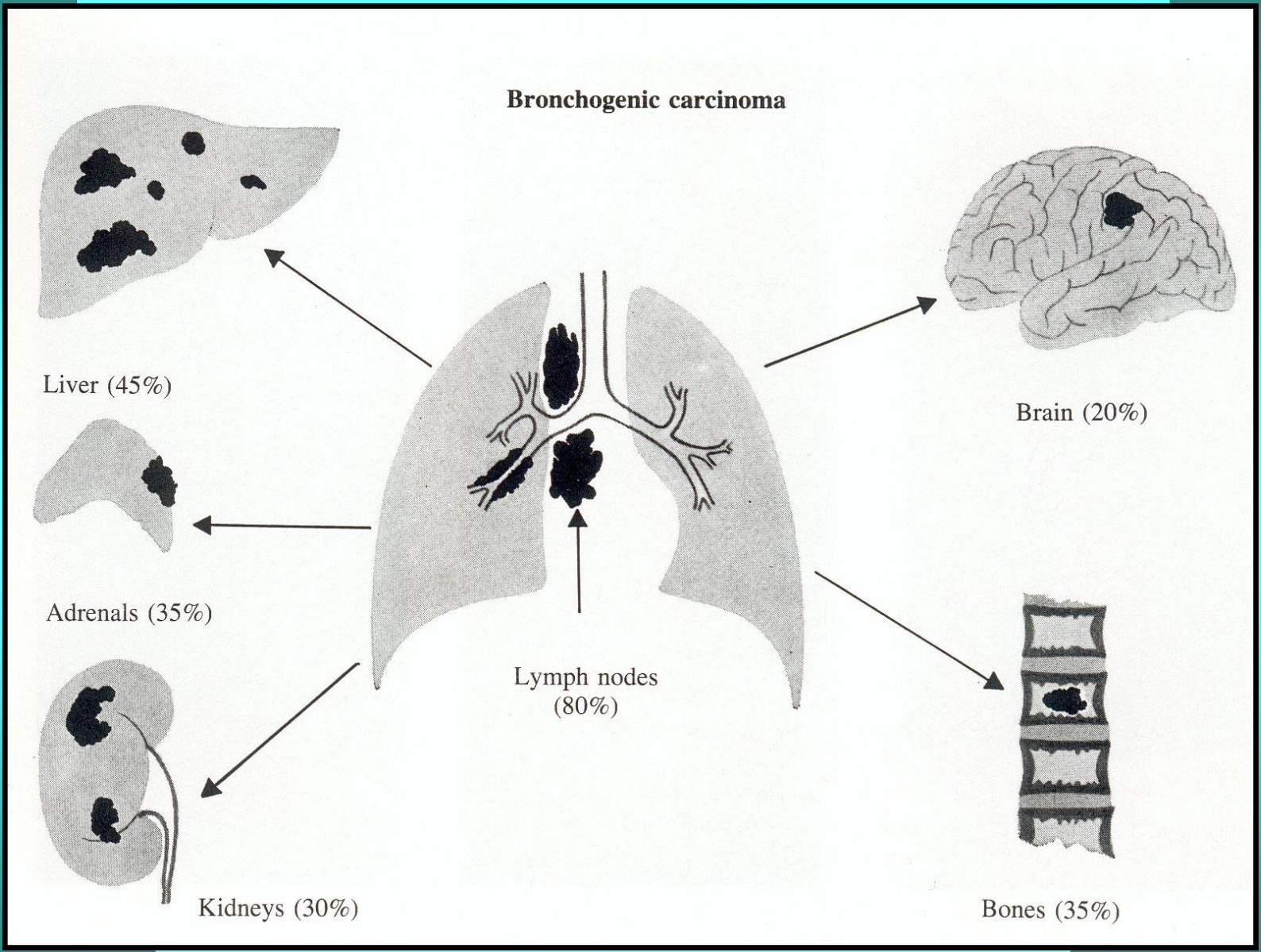
TUMORS OF LUNGS

BRONCHIOALVEOLAR CARCINOMA
= adenocarcinoma (accord. WHO)

1 – 9% OF LUNG CANCERS



TUMORS OF LUNGS

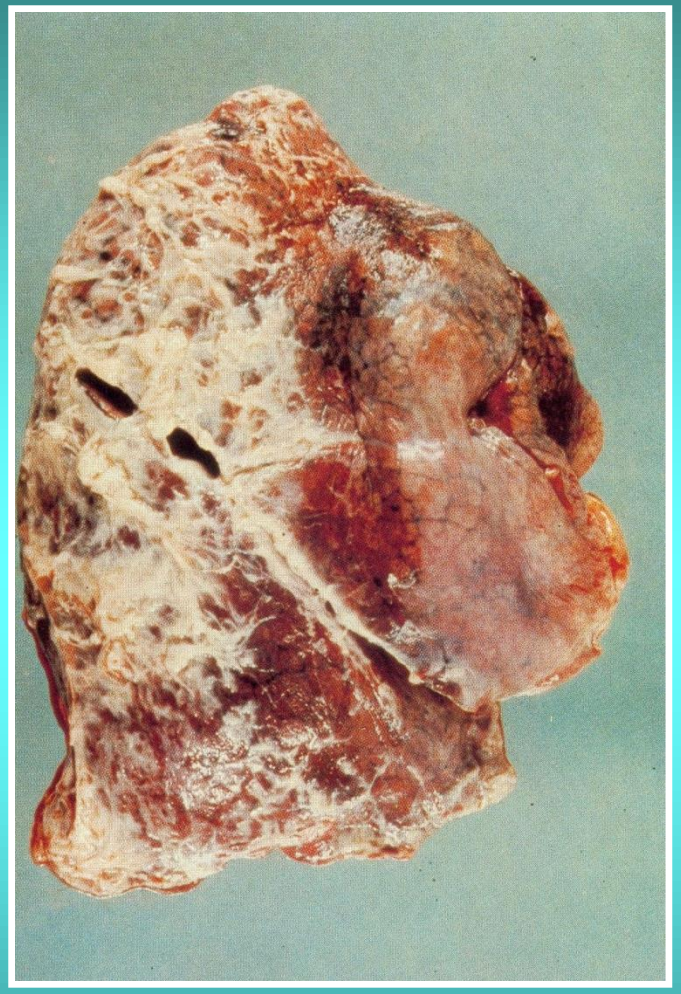


MOST COMMON SITES OF METASTASES

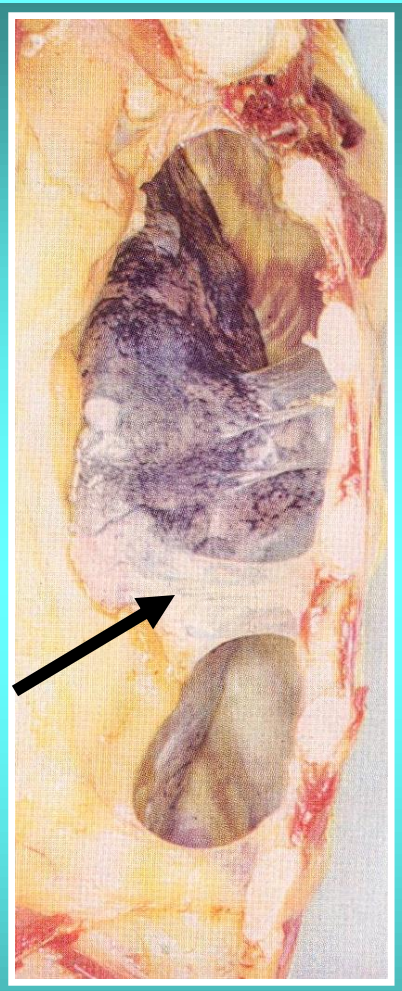
TUMORS OF LUNGS

REMEMBER!!! THE LUNGS ARE THE MOST COMMON SITE OF METASTASES, ESPECIALLY OF MESENCHYMAL TUMORS

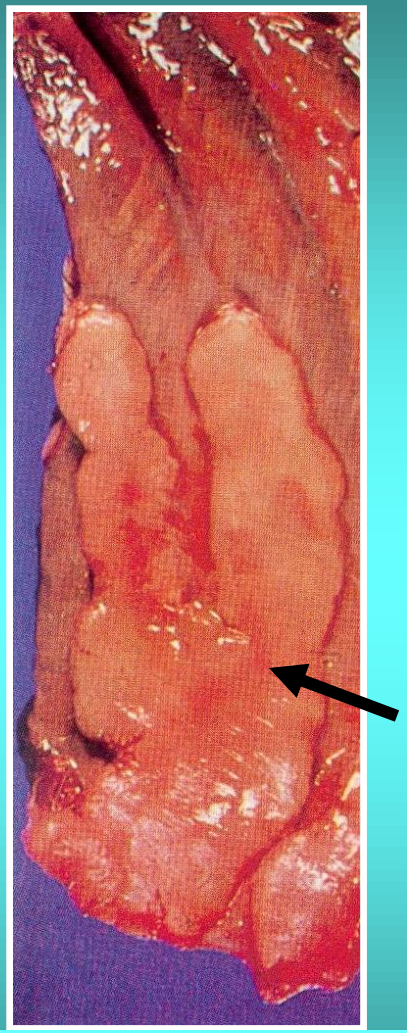
PLEURITIS



PURULENT PLEURITIS



PLEURAL ADHESIONS



CALCAREOUS PLEURITIS
(with calcium deposits)

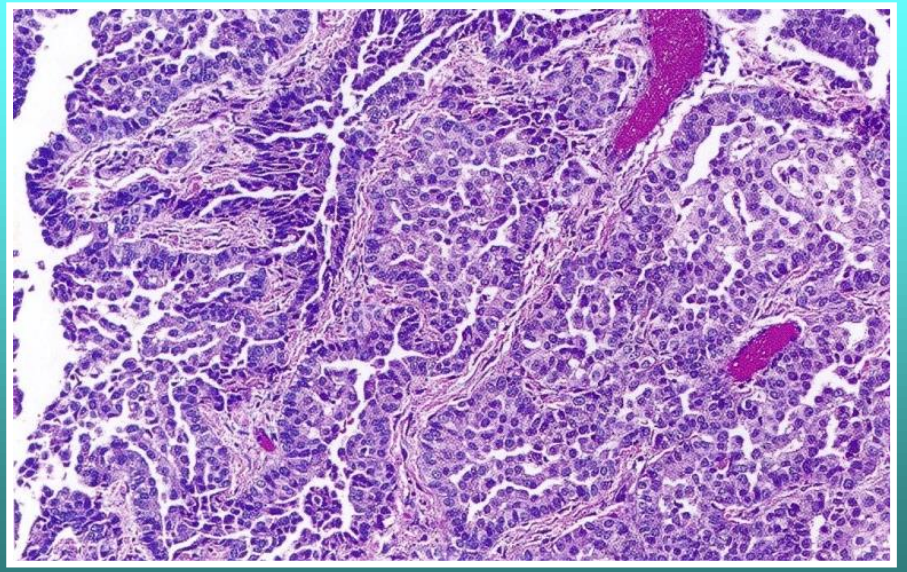
MESOTHELIOMA

AN ASBESTOS-RELATED

MALIGNANT TUMOR OF THE LINING OF THE LUNG (PLEURA) OR THE LINING OF THE ABDOMINAL CAVITY (PERITONEUM)

TUMORS OF PLEURA

MESOTHELIOMA




THANK YOU