#### Module: Respiratory system

Topic: Acute pneumonia: bronchopneumonia, croupous, interstitial. Morphological characteristics, outcomes and complications. Features of pneumonia depending on the nature of the causative agent. Features in children. Outcomes, complications, causes of death.

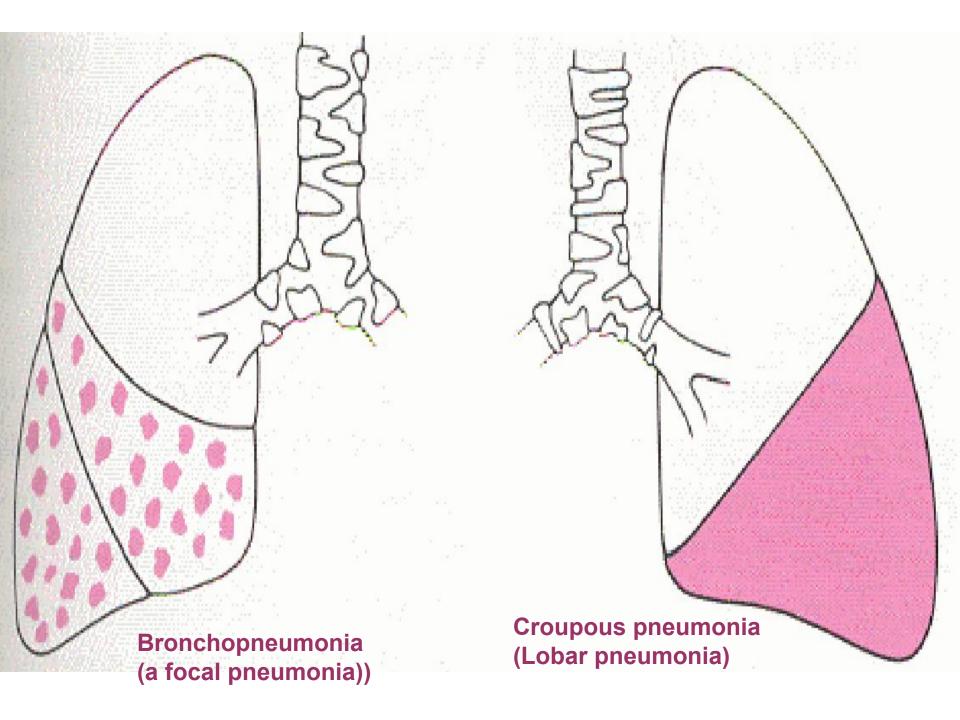
Compiled by d.m.s. Shabdarbaeva D.M.

#### Aim of the lesson:

 to study etiology, pathogenesis & pathological anatomy of organs of respiratory system, to learn to differ them by morphological picture, to study clinico-morphological variants of acute pulmonary diseases, peculiarities in children, complications, causes of death.

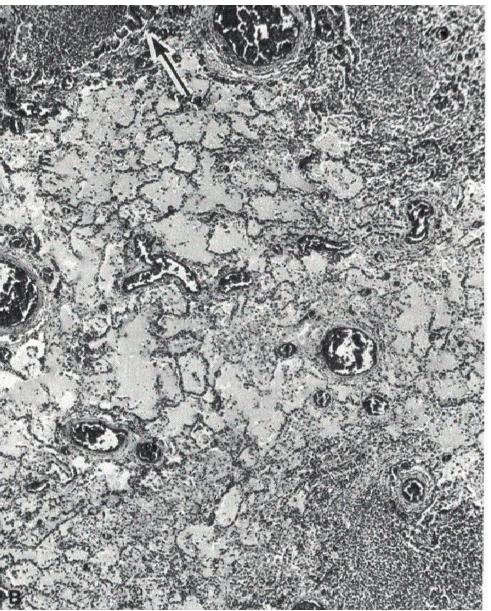
#### The objectives:

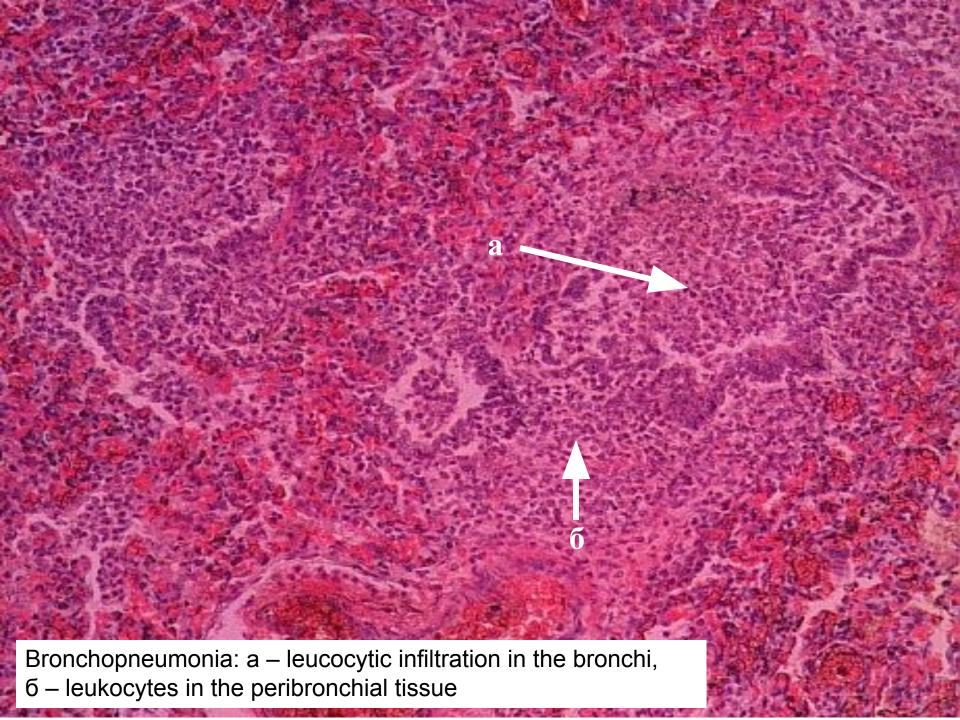
- Student must know :
- morphological characteristics of acute and chronic inflammatory pulmonary diseases, COLD, pleuritis;
- age features of pneumonia;
- Student must be able :
- to interpret macro- & microscopic changes of pulmonary diseases.

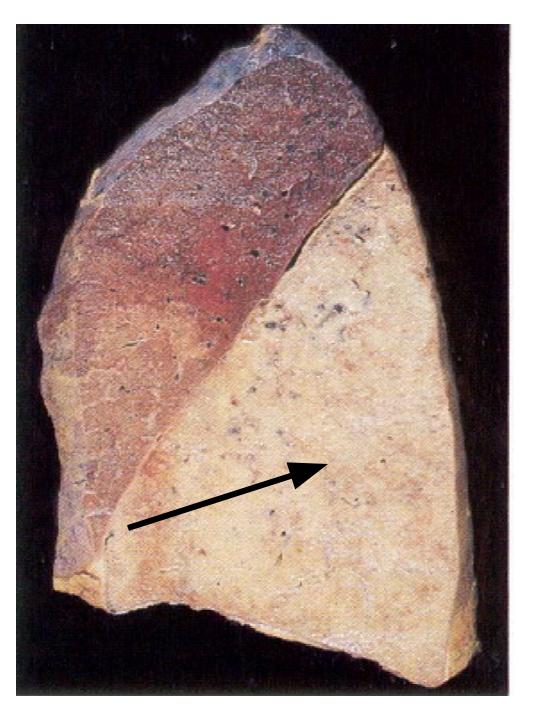


#### Bronchopneumonia



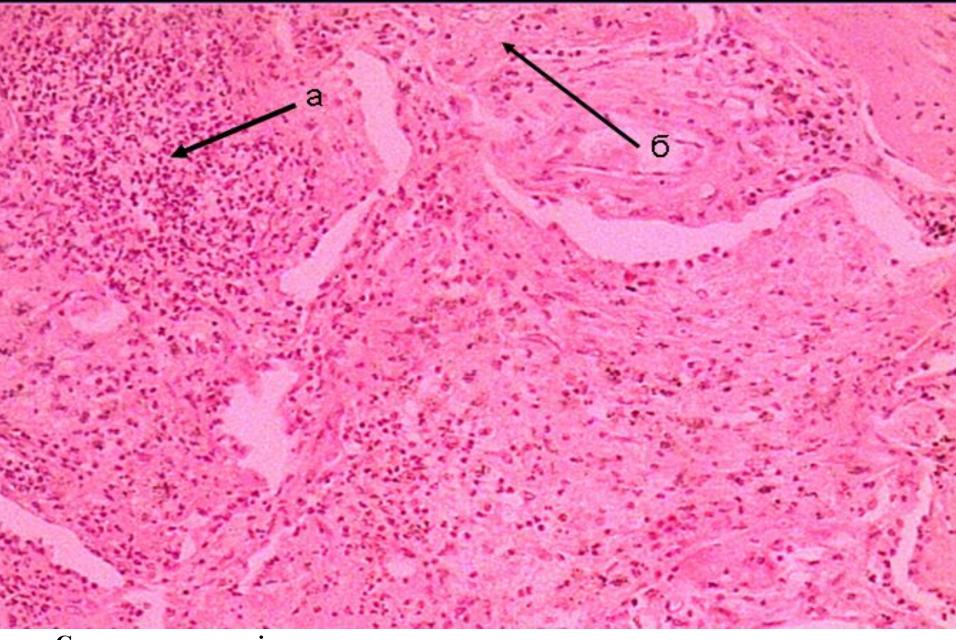




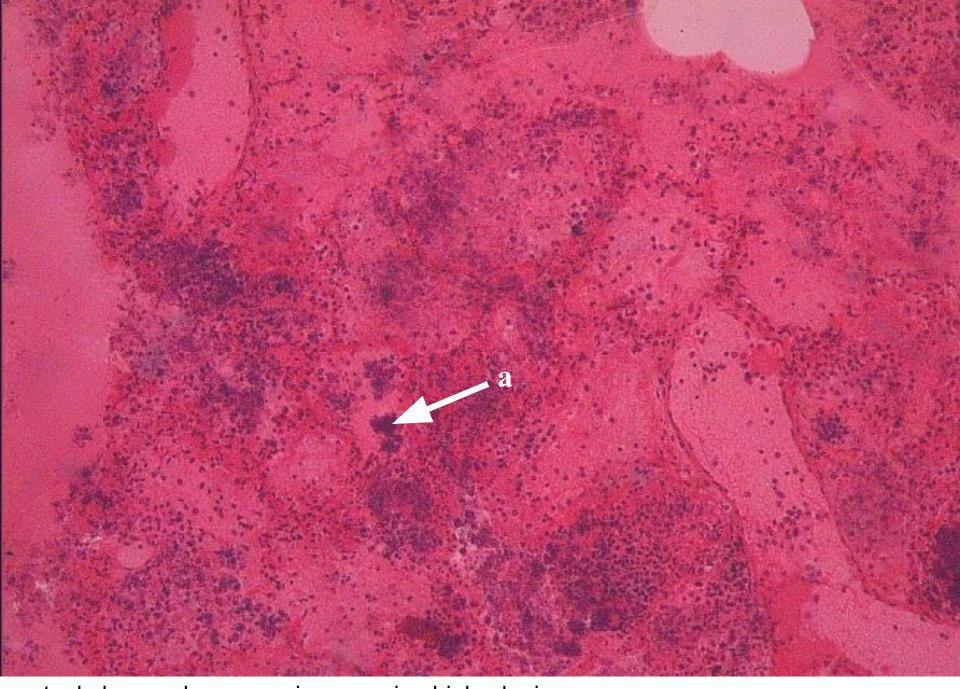


#### **Croupous pneumonia Stage of gray hepatization**

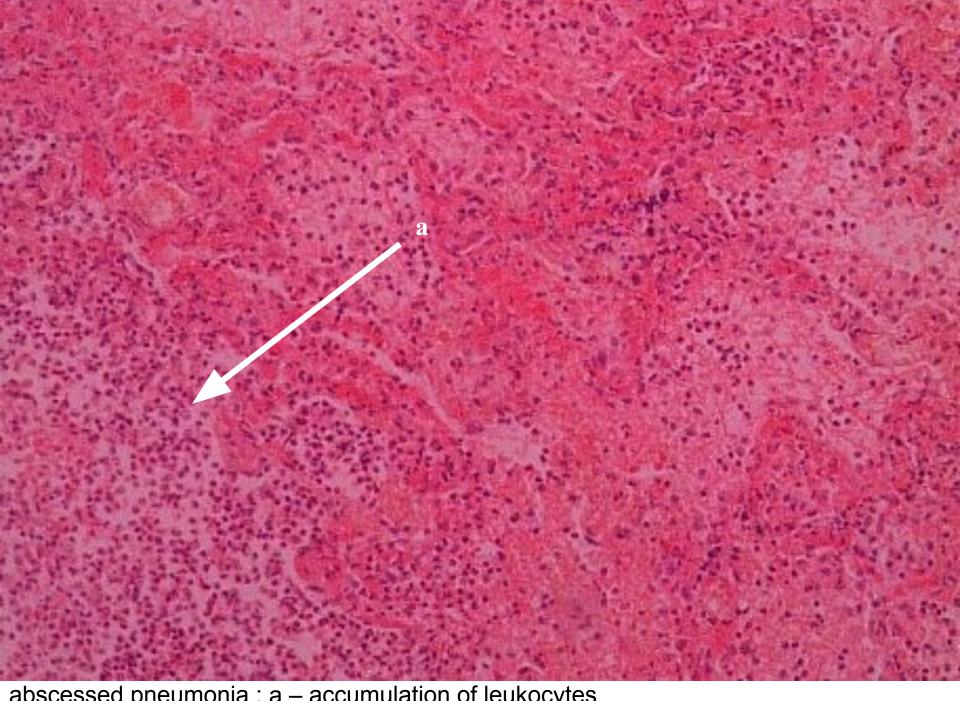
Stage of gray hepatization develops on 4 - 6th day.



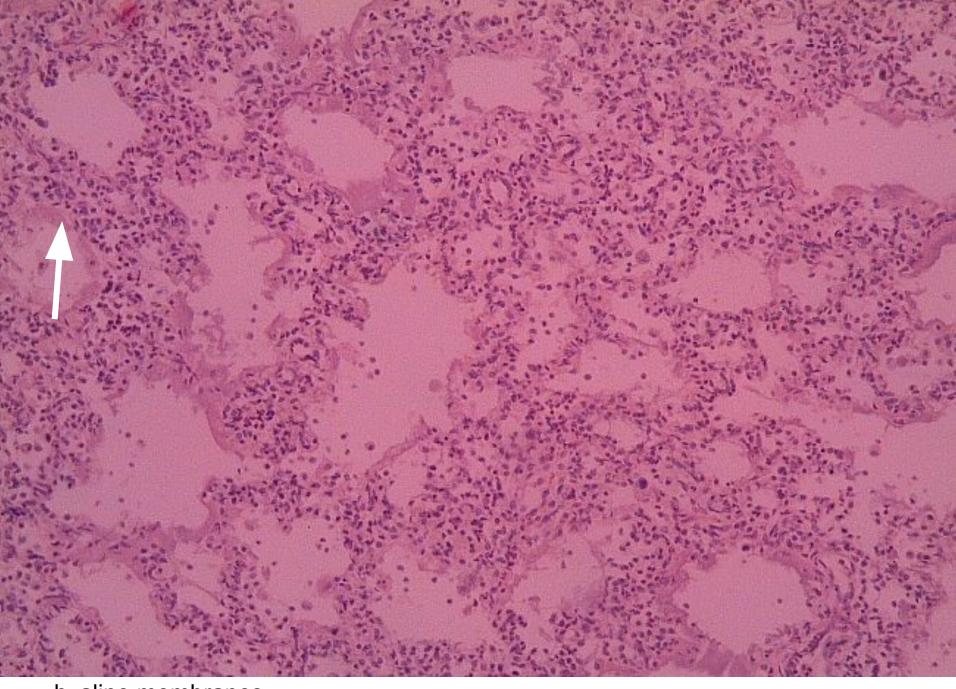
Croupous pneumonia
a – leukocytes σ – fibrin strands



staphylococcal pneumonia : a – microbial colonies



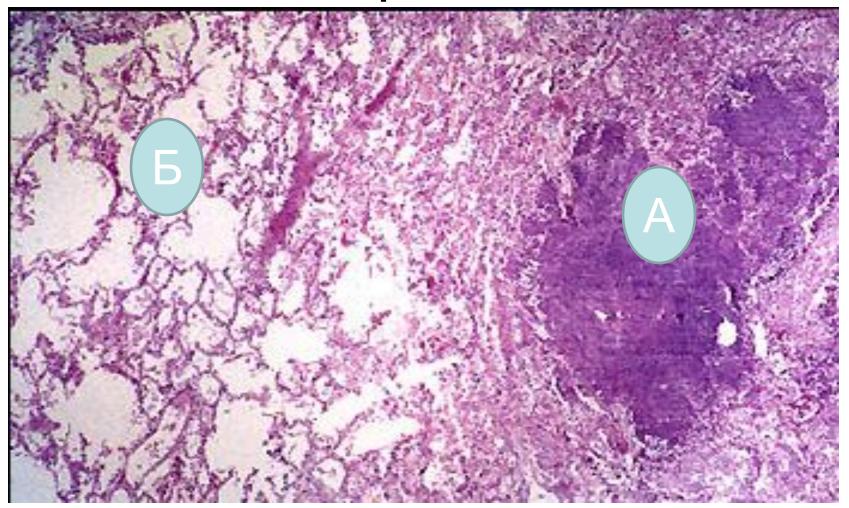
abscessed pneumonia : a – accumulation of leukocytes



hyaline membranes



### Bronchopneumonia

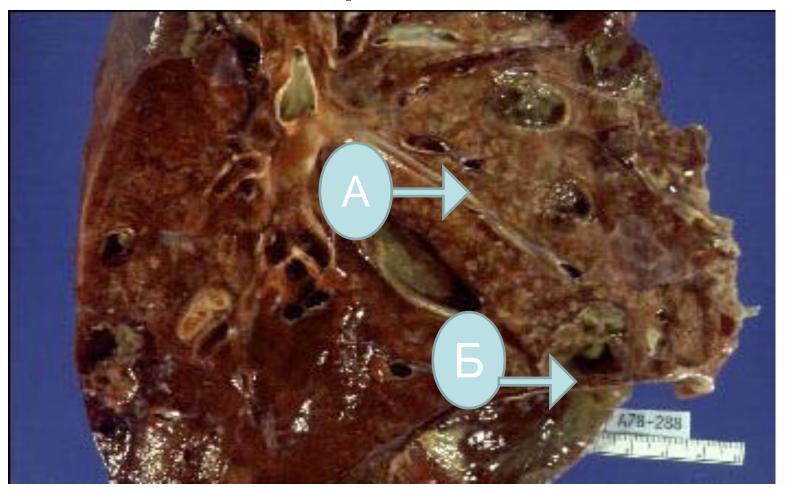


- A. bronchopneumonia focus
- Б. unaltered tissue

## Fungal pneumonia

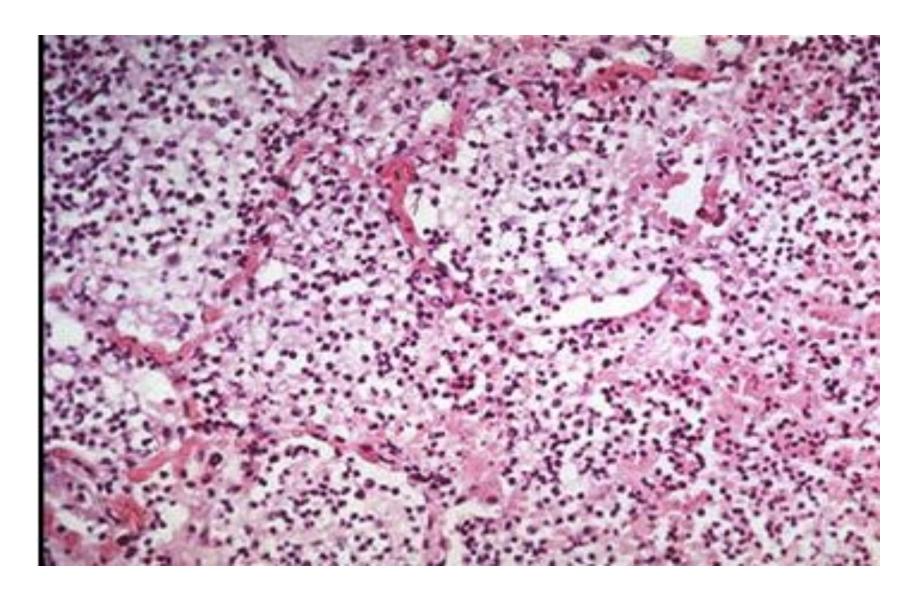


#### Bronchopneumonia

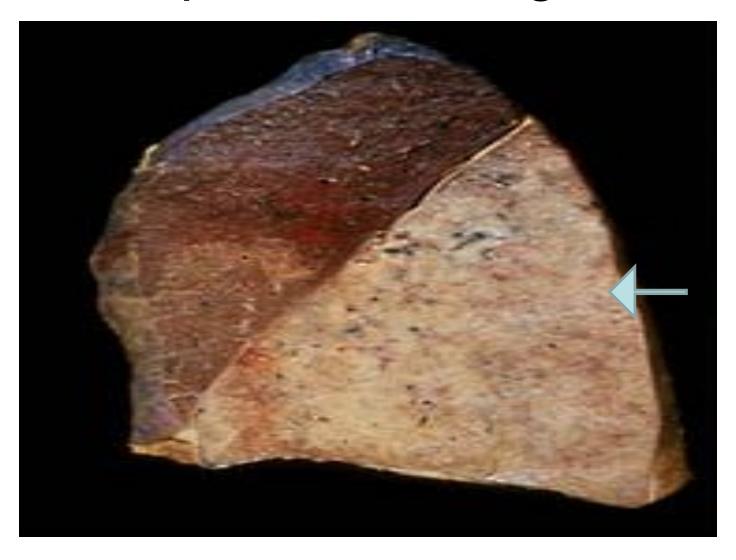


- A. foci of bronchopneumonia
- Б. abscess

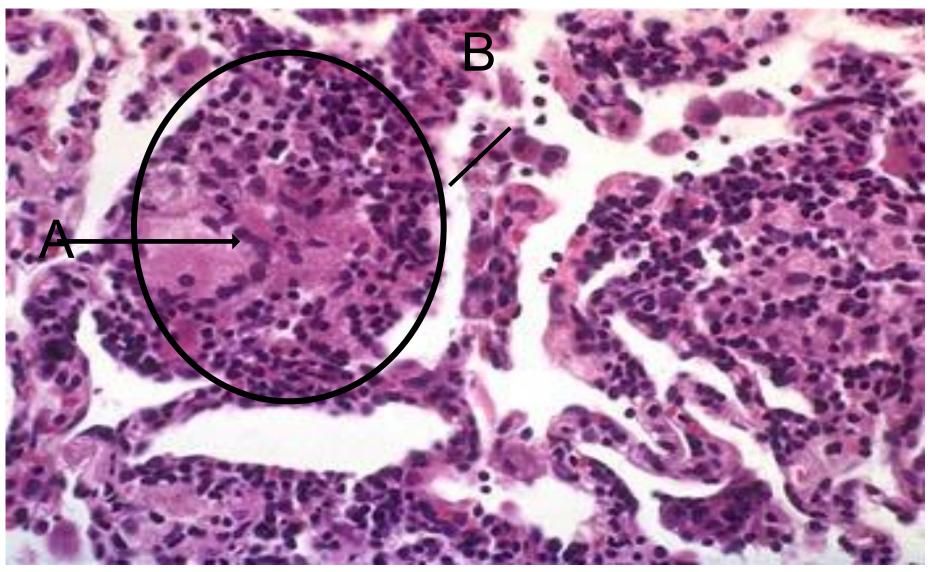
### Croupous pneumonia



# Croupous pneumonia, gray hepatization stage



## pneumonitis



A-polynuclear giant cells, B-granuloma.