## Pleural pathology Effusions

#### Accumulation of interstitial fluid or exudate in the pleural cavity

#### Pathogenetic mechanisms:

- Increase of hydrostatic pressure
- Increase of vascular permeability
- Reduction of oncotic pressure
- Increase of negative intrapleural pressure (atelectasia)
- Reduction of lymphatic drainage

## Pleural pathology Effusions

#### Denominations:

- hydrothorax (non inflammatory)
  - Heart failure
  - Kidney failure
  - Liver cirrhosis
  - Meigs' syndrome (ascites + ovarian fibroma)
- pyothorax empyema
- Chylothorax (lymph)
- Haemothorax (blood)

### Pleural pathology Pleuritis

- Topography
  - Mono/bilateral
  - Circumscribed/diffuse



- Course:
  - acute
  - subacute
  - cronic



- ■Exudate features:
  - •serous
  - sero-fibrinous
  - •fibrinous
  - suppurative
  - gangrenous
  - haemorrhagic



## Pleural pathology Pleuritis

#### Etiology:

- viral (Coxachiae)
- bacterical (Cocchi, b. Koch)
- fungal (Candida, Actinomycetes)
- collagenopathic (A.R., LES)
- toxic (uremia)
- neoplastic

# Pleural pathology Pleurisy

- Pathogenetic mechanisms:
  - primitive
  - secondary
    - para/metapneumonic
    - haematogenous
    - lymphogenous
    - post-traumatic

# Pleural pathology Pleurisy

- Anatomical and pathologic features:
  - Surface clouding
  - Reduction of the reticulated pattern of the lung
  - Stratification of the exudate
  - laciniae / plaques / synechiae
  - Deposition of the exudate in slope regions
- Evolution:
  - Sack-like pleurisy
  - Fibrothorax

### Pleural pathology Neoplasms

- Secondary (more frequent)
  - Lung
  - Breast
  - Lymphoma
  - Liver
  - Stomach
- Primary
  - Solitary fibrous tumour (benign) (CD34+)
  - Mesothelioma (asbesto-related, malignant)
    - Monophasic = sarcoma-like (Calretinin, WT1)
    - Biphasic = adenocarcinoma-like + sarcomatous component