

# Bronhopneumonia

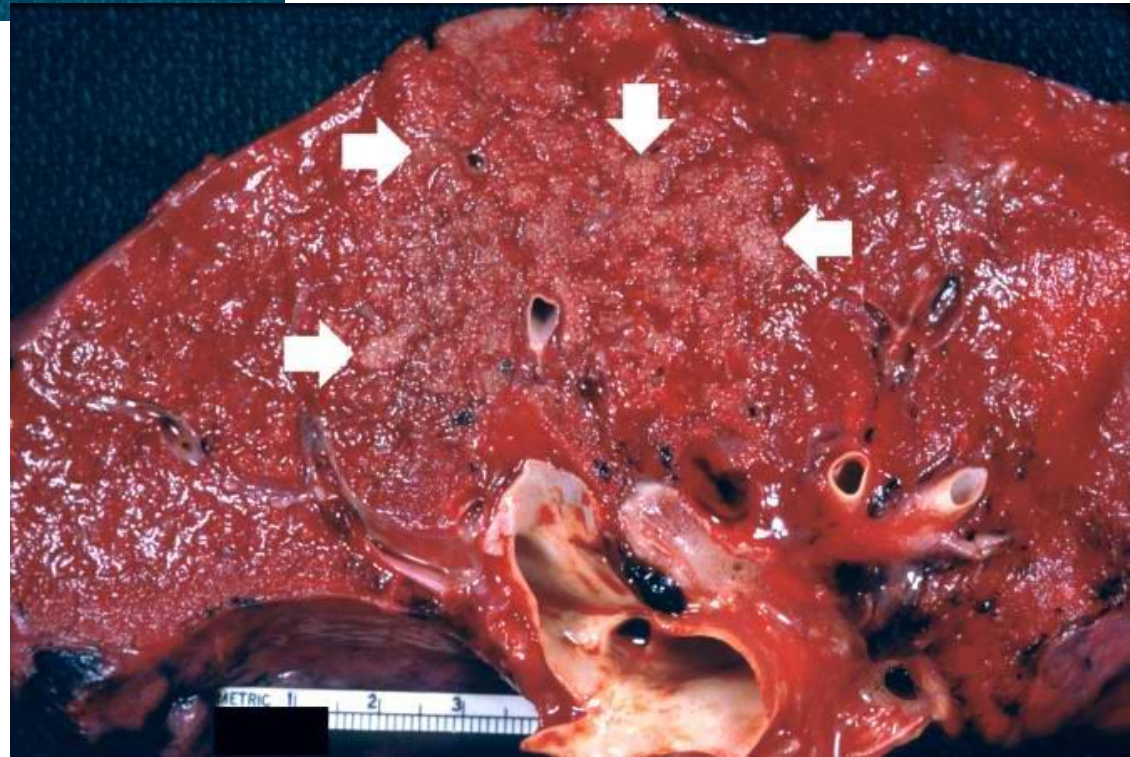
# Definitie

- Pneumonie cu zone de condensare multiple, cu distributie lobulara, caracterizata:
  - Anatomic
    - nodul Charcot peribronsic
  - Clinic
    - zone cu sindrom de condensare pulmonara
  - Rx
    - opacitati micro/macronodulare diseminate, care pot conflua

# Anatomic



- Noduli Charcot peribronhici





# Macroscopic

- Bronhopneumonie



# Etiologie

- Bacteriana, unica sau in asociere:
  - Pneumococ,
  - Haemophilus influenzae,
  - Streptococ,
  - Staphylococ,
  - Klebsiella,
  - Pseudomonas,
  - Proteus, etc.

# Etiologie

- Factori favorizanti:
  - Varsta mica sub 2 ani
  - Distrofie, rahitism
  - Boli de copii, infectii respiratorii – v. gripal
  - Inhalatii alimentare
  - Corpi straini
  - IOT
  - Corticoterapie, Imunosupresie
  - Malformatii pulmonare

# Patogenie

- Infectie
  - Aerogena
  - Hematogena
    - br pneumonie metastatica in septicemii
- Leziuni de bronhoalveolita supurata, care centreaza o bronhie
- Adenopatie mediastinala nesupurativa



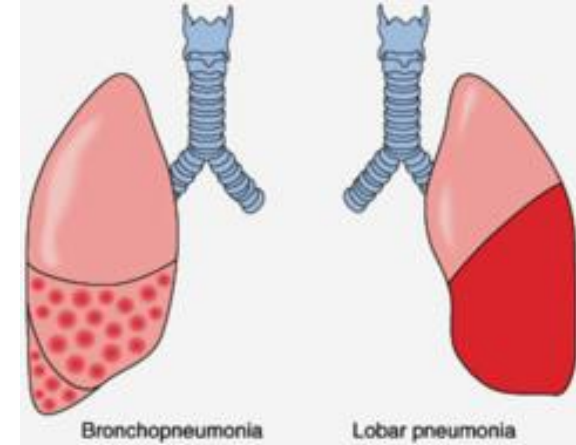
# Clinic

- Debut: IACRS
- Perioada de stare:
  - apare brutal febra inalta, paloare sau cianoza,
  - dispnee, varsaturi, diaree, meteorism,
  - convulsii
- 3 sindroame:
  - **Respirator**
  - **Toxiinfectios**
  - **Cardiovascular**



# Clinic

- Sindromul respirator
- Semne functionale:
  - tahipnee 60-80 b/min,
  - tiraj, expir scurt,
  - geamat expirator,
  - batai ale aripioarelor nazale,
  - cianoza
- Semne fizice de condensare pulmonara:
  - submatitate localizata, diseminata
  - zone de bronhofonie si respiratie suflanta
  - raluri crepitante in focare



# Clinic

- Sindromul toxiinfectios
- Afectare multiorganica legata de infectie:
  - Hipoxie, hipercapnie si acidoza
  - Febra mare
  - SNC:
    - Agitatie, somnolenta, coma, convulsii, meningism
  - Tulburari digestive, SAD
  - Manifestari renale:
    - oligurie, azotemie, albuminurie

# Clinic

- Sindromul cardiovascular
- Generat de: hipoxie, acidoza
- Miocardita toxica:
  - Tahicardie
  - Cardiomegalie, sufluri, galop
  - Oligurie, edeme, turgescența jugularelor
  - Puls filiform, hipoTA, cianoza
  - Extremități reci, timp de recolorare prelungit
  - Tulburări de ritm cardiac
- Colaps cardiovascular

# Rx cardiopulmonar

- Opacitati rotunde micro si macronodulare diseminate sau confluyente, pe ambele campuri pulmonare.
- Poate sa fie si aspect pseudogranulic, in forma micronodulara – dg dif TBC.
- Se poate descrie reactie pleuritica minima sau pleurezie franca.
- Pot sa apara imagini clare in cadrul opacitatilor nodulare – zone hidroaerice in bronhopneumonia abcedanta.

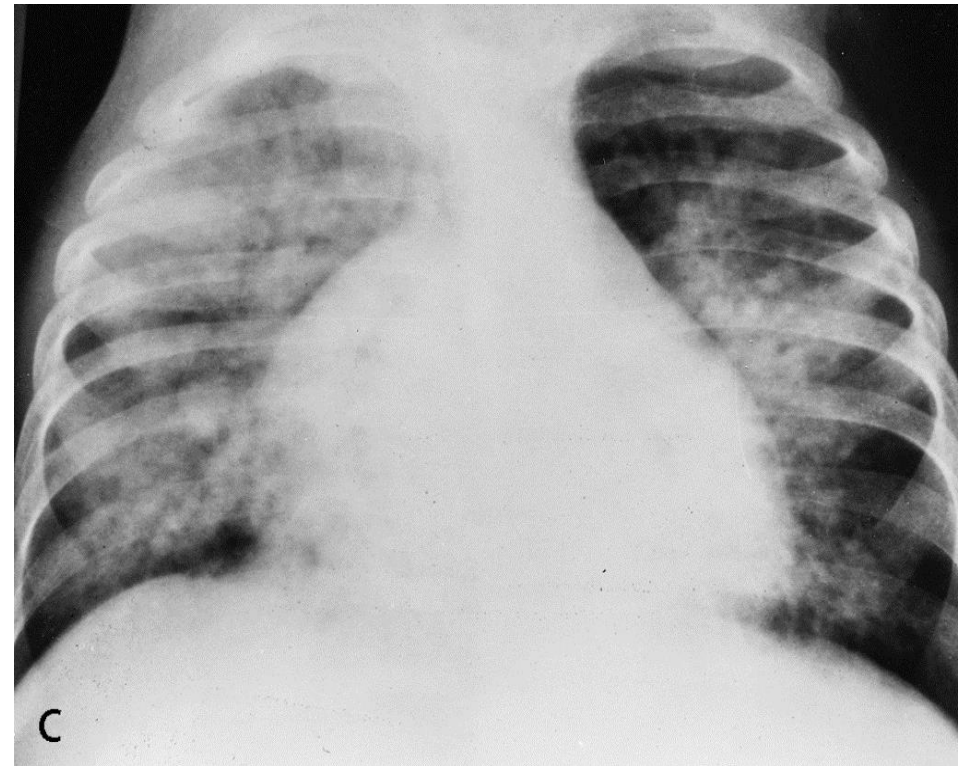
# Rx cardiopulmonar

- Opacitati micro/macro nodulare rotunde
  - Diseminate sau confluyente
  - Pe ambele campuri pulmonare
- Reactie pleuritica minima sau pleurezie poate fi +.



# Rx cardiopulmonar

- Bronhopneumonie





# Laborator

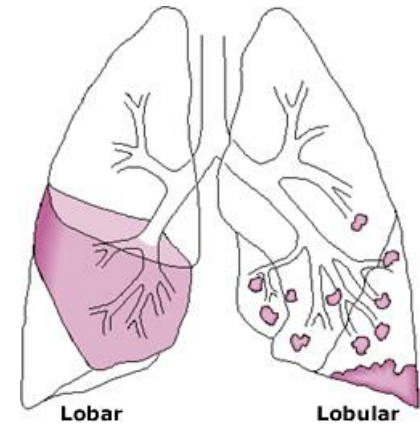
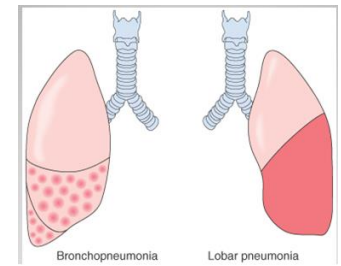
- HL: Leucocitoza cu Neutrofilie
- VSH, fibri, CRP +++
- Agent cauzal izolat in:
  - aspirat traheal, hemocultura, puroi pleural
- Astrup – acidoza mixta
- Ionograma sanguina si urinara
- Punctie lombara – meningism, convulsii, coma
- ECG,
- Oftalmo-FO,
- PPD 2U
- (Dg. Dif.: miocardita, meningita, tuberculoza)

# Dg +

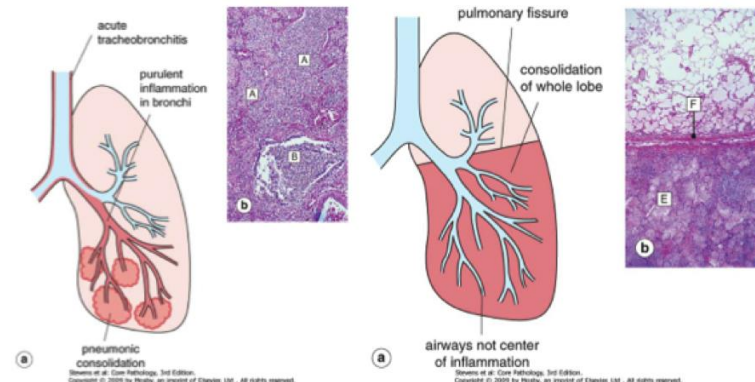
- 3 sindroame:
  - Respiratos
  - Toxiinfectios
  - Cardiovascular
- Rx cardiopulmonar:
  - opacitati micro/macronodulare diseminate pe ambele campuri pulmonare, care pot conflua.

# Diagnostic diferential

- Alte pneumonii severe
- Tuberculoza: PPD 2U, quantiferon
- Polipneea din acidoza metabolica
- Miocardita



## Bacterial pneumonia



# Tratament

- Etiologic:
  - Asociere de ATB pt germenii cel mai frecvent implicati pt grupa de varsta.
- 0-3 luni: streptococ B hem, germ gr.neg
  - **Ampi + Genta+ Oxa (Lynco)**
- 3luni-6 ani: pneumococ, HI
  - **Ampi/Peni**
  - **Ampi/Peni + Aminoglicozid**
- Peste 6 ani: pneumococ
  - **Penicilina, sau Ampi, sau Cefalosporina II/III**
- Durata- inca cel putin 5 zile de afebrilitate.
- In bronhopneumonia stafilococica: 3-4 sapt, iv

# Tratament suportiv

- Oxigen izoleta/masca
- Antitermice
- Aspirarea secretiilor
- Mucolitice
- Ventilatie mecanica:
  - In cazuri severe
- Corectie h-e si a-b
- Corectia anemiei
- Sedative
- Nutritie parenterala

# Complicatii

- Diseminare septica: de vecinatate sau la distanta
  - pleurezie, abces,
  - septicemie,
  - endocardita,
  - pericardita,
  - miocardita,
  - meningita,
  - hepatita,
  - nefrita, etc
- Mecanice
  - emfizem mediastinal,
  - pio-pneumotorax
- Toxice:
  - soc septic
- Metabolice:
  - deshidratare,
  - dezechilibre hidro-electrolitice,
  - hipoglicemie.



# Tratamentul complicatiilor

- Edem cerebral:
  - Manitol, Glucoza 33%, Furosemid
- Convulsii:
  - Diazepam, Fenobarbital
- Pleurezie:
  - Drenaj pleural
- Insuficienta cardiaca:
  - Digitala, Furosemid.

# Evolutie si prognostic

- Bune, daca:
  - diagnosticul e precoce,
  - tratamentul e corect!
- Nefavorabile:
  - varsta mica,
  - handicap asociat!