Pulmonary sequelas in case of tuberculosis

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Sequelae 1

• Radiologic images:  - retraction
  - calcification
  - bronchiectasis.

• One can observe in case of « spontaneous recovery » of a non treated TB. Active BK remain alive in calcified cicatrix . An active TB can occur in the evolution, especially in case of immuno-depression.
One can also observe sequelae after an adapted treatment, especially if this treatment is initialised with delay and if the pulmonary lesions are severe.

- It is always necessary to try to find AFB in sputums before making the diagnosis of TB sequela.
Sequelae (3)

Sequelae can be symptomatic even without active TB:

- Hemoptisies,
- Infections with non TB bacteria or aspergillus
- Dyspnea and chronic respiratory failure
- +++: Do not treat again improperly with anti-TB in case of AFB negative sampling in sputum
- +++: It is very important to keep the old chest x ray for comparison with the recent radographies
Primary infection sequela
Tuberculous pneumonia. Retractil evolution with sequelae despite treatment
Pulmonary tuberculosis. Excavated lesions on the left side. AFB+ the 04/05/2006
Same patient after treatment, the 15/05/07: recovery with few radiological sequelae.
Excavated lesions with AFB+ in right superior lobe
Evolution during and after treatment: 18 months
Recovery with nearly no sequelae
Pulmonary tuberculosis with adenopathies, right bulky cavity and left pneumonia
Recovery with important cavity as sequela in right superior lobe
Retractile sequela of bilateral apex TB
Retractile sequela of a left lung severe TB
Retractile sequela of a left lung severe TB
Retraction and ascent of left hilus: sequela of left apex TB
Calcified and retractile sequela of pleural TB
Pleural calcified lesion « cuttle fish bone »
(courtesy of Pr Anthoine)
Rétraction, calcification, bronchiectasis
Retractile sequela of bilateral TB with cavitation on the right side, and thickness of the pleural wall on the left side
aspergilloma
Aspergilloma
Man, 60 years old, hemoptysis. AFB negative in sputum and bronchial aspiration. But aspergillus ++ in bronchial aspiration.
TDM in décubitus and procubitus position
calcified aspergilloma
(courtesy of Pr Anthoine)
Calcified adenopathies.
Inactive lesions?

AFB + in sputum! Active tuberculous lesions coexisting with calcified lesions.  

It is always necessary to search AFB in sputum or in bronchial aspiration before making the diagnosis of sequelae.

Endoscopic view: granuloma and fistula
Calcified primary infection and calcified adenopathies
Tuberculous pyo-pneumothorax, avec pleural thickness

The treatment of these lesions is very difficult. Thoracic surgery is necessary, if possible...
thoracoplasty, for treatment of tuberculous pneumothorax or pyo-pneumothorax
Bilateral bronchiectasis
TB primary infection when 1 year old (1945)
22 years later ... (1967)
60 years later… (2006)
Bronchiectasis post TB infection