Tuberculous adenopathies

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Anatomic recall
The tuberculous adenopathies are:

- Sometimes unilateral (latero-tracheal)
- Most often bilateral and asymmetric
- Sometimes compressive, especially in children
- Some lesions are possible inside the bronchi: compression or fistula
- Adenopathies are frequent in cases of AIDS: they are often bulky and associated with other pulmonary lesions or extra-pulmonary TB
- AFB are most often negative in sputum, except in cases of pulmonary lesions (pneumonia, cavity..) that are associated with adenopathies
Right latero-tracheal opacity: Tuberculous adenopathies
Man, 20 years old, asymptomatic, good condition, HIV - systematic chest radio. AFB negative in sputum.
Right latero-tracheal and precarena space adenopathies. AFB-, Diagnosis made by mediastinoscopy: epithelioid and gigantocellular granuloma. Culture +
African woman, 27 years old. Left cervical adenopathy

Left latero-aortic adenopathies in superior mediastinum
Puncture of the cervical adenopathy:
Pus with AFB+
Tuberculous right hilar adenopathy
Widening of the mediastinum: adenopathies of superior and middle mediastinum

Normal chest x-ray
Don’t forget:

For a good analysis of the mediastinum, it is necessary to have a good quality chest x-ray:

• Strictly front view
• Complete inspiration
• Patient standing up, postero-anterior incidence
Young child, one year old: TB primary-infection

Notice the bilateral adenopathies with inferior lobe atelectasis (left inferior bronchus compressed by adenopathy)
Tuberculous bulky adenopathies. AIDS context
Tuberculous adenopathies with endo-bronchial fistula (endoscopic view)
Fistulas coming from TB adenopathies

Fistula in the right para-cardiac bronchus
Tuberculosis / HIV +
Tuberculosis with mediastinal adenopathies and pneumonia in a patient with AIDS. AFB++ in sputum
The association of unilateral or bilateral pneumonia with mediastinal adenopathies is very indicative of Tuberculosis, and often, HIV context.
Adenopathy in left aorto-pulmonary space (and widening of superior mediastinum due to TB adenopathies)

normal chest radiography image
Node calcifications: sequela of primary infection
Left hilar calcification: sequela of a TB primary infection
However, the mediastinal adenopathies are not always tuberculous...
Male, poor health condition, smoker, dyspnea
Right inferior lobe cancer and metastatic adenopathies
(laterotracheal space). Notice the associated emphysema.
Small cell carcinoma with bulky mediastinal adenopathies
Evolution after 6 cycles of chemotherapy
Bronchial cancer with superior vena cava syndrome
Bronchial cancer with right hilar metastatic adenopathy
Man, 60 years old, weight loss and asthenia, cough with hemoptoic sputum. AFB-
Bronchial cancer!

Right superior bronchus Spur infiltrated by the cancer

normal bronchus
Lymphoma
Trap: mediastinum enlargement in an older woman with cyphoscoliosis
Differential diagnosis: vascular bulky hilus: Convergence sign of the hilus
Differential diagnosis: posterior overlap sign
Differential diagnosis: Posterior overlap sign (2)
Differential diagnosis: Anterior overlap sign
(courtesy of Dr. Bellamy)