A case of miliary tuberculosis with symptomatic huge intracranial tuberculomas

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Introduction
Combined clinical forms of pulmonary and extra-pulmonary tuberculosis are relatively rare in non immunocompromised patients.

CASE PRESENTATION
- We describe a case of 31-year-old man with a generalised febrile miliary treated as due to tuberculosis.
- progressive symptoms since 25 days with dyspnoea, asthenia, weight loss , dry cough and fever with night sweats and mucocutaneous paleness.
- Smoking: 13 pack-year
- Chest X-ray: haematogenous miliary.
- T° 37°.
- Biologic tests:
  - CBC:
    - HB 10.9 g/dL
    - Plt : 109 000 / mm³
    - RD 4.05 / mm³
    - HB 10.9 g/dL
    - Sedimentation rate : 25 mm1h
    - CRP rates : 96 mg/l
    - Alkaline phosphatase : 720 IU/L.
  - Lungs: 100%.
  - Negative culture for M. tuberculosis.
  - HIV negative, Hepatitis B and C serologic testing negative.
  - TST negative.
- Abdominopelvic ultrasound: normal.
- Cervical ultrasound: small right cervico-cervical node of 7 mm
- CT scan of brain: haematogenous miliary.
- Multiple brain tuberculomas (7 to 12 mm).
- Brain MRI showed multiple huge intracranial tuberculomas up to 20.7 mm.
- Lung miliary: haematogenous.
- Chest radiography showed also a disappearance of lung miliary.
- Alkaline phosphatase: 720 IU/L.
- Calcium: 9.5 g/L.
- CRP rates: 96 mg/l.
- Incase in liver transaminases (ALAT : 91 IU/L, ASAT: 70 IU/L ).
- Combined clinical forms of pulmonary and extra-pulmonary tuberculosis are relatively rare in non immunocompromised patients.

Evolution:
A good clinical evolution with normalization of liver function was noticed after few days of TB treatment.

One month later, the patient presented with a sudden onset of dysphagia to solids, vomiting and swallowing trouble followed by neurological deficits such paraesthesia of left upper and lower limbs and dysarthria. The patient received gastrointestinal transits that revealed pulmonary aspiration in trachea and left bronchi.

Discussion:
Combination of brain tuberculomas and miliary tuberculosis is common in immunocompromised patients but only few cases were reported in immunocompetent patients.

The haematogenous spread of bacilli attending, mainly the lungs but other localizations can be observed particularly in nervous system.

Brain tuberculomas mainly occur in the cerebrum and cerebellum.

In this patient, after an initial response to treatment, neurological deficits (dysphagia, vomiting, swallowing trouble and dysarthria) were developed despite anti-TB treatment. This observation was reported by other authors, it is due to the expansion of brain tuberculomas the first few weeks up to the 20 mm.

Prolonged high-dose steroid therapy and preventive seizures treatment with the same anti-TB therapeutic regimen was efficient.

Conclusion:
Our case highlights that neurological signs in patient with lung miliary tuberculosis should alert to brain MRI.

High-dose steroid therapy and preventive seizures treatment should be included in such cases.

References:
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