There’s Still Tuberculosis, in a Country with Routine BCG Immunization!

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Introduction
Miliary tuberculosis (TB) results from the hematogenous dissemination of M. tuberculosis bacilli and is one of the leading infectious cause of death worldwide. In children, it usually results from a progressive primary infection rather than reactivation of a latent focus with subsequent spread. The clinical presentation can be acute but is more likely to be subacute or chronic. In both cases, the manifestations are highly variable so a high index of clinical suspicion for early diagnosis and timely treatment institution can be lifesaving.

Case Report

- **Patient:** 35-day
- **History:**
  - Fever
  - Cough
  - Dyspnea
- **Physical Exam:**
  - Normal
- **Laboratory:**
  - Leukocytes 7600/uL
  - Neutrophils 4650/uL
  - PCR 181.2 mg/dL
- **Culture:**
  - Blood, urine and liquor sterile
- **Radiography:**
  - Chest X-ray

Clinical worsening:
- Fever
- Dyspnea
- TST anergic
- IGRA positive
- HIV negative

Bronchoscopy:
- Culture: (bronchoalveolar lavage gastric aspirate)
- Mycobacterium tuberculosis

Additional investigation:
- Choroidal tubercles
- Mediastinal lymph nodes enlargement
- Pleural effusion
- Pericardial effusion
- Hepatomegaly

Miliary Tuberculosis

HEMOPHAGOCYTIC SYNDROME

- No specific chemotherapy was necessary to hemophagocytic syndrome

**Screening of contacts**
Pulmonary TB father + TB infection mother (without genital TB) + 7 cases of pulmonary TB at the father’s work place

**Treatment**
- Cefotaxime + Gentamicin + Vancomycin
- Isoniazid + Rifampin + Ethambutol + Pyrazinamide
- Methylprednisolone
- Percutaneous drainage
- Superior right lobectomy
- Progressive clinical improvement

Conclusion
In Portugal, tuberculosis remains an important public health issue, despite routine BCG immunization at birth. As in the present case, children work as sentinel cases, indicating ongoing transmission in the community.

The absence of clinical improvement with a specific therapy should prompt a search for an alternative diagnosis or an eventual complication. In this case, the macropseudocyst was originated from a caviation that acquired expansive characteristics due to valvular effect of the drainage bonchus. Regarding the hemophagocytic syndrome, it’s a rare, aggressive and life-threatening syndrome, often associated with a viral infection, although it has been described in the setting of bacterial infections, such as tuberculosis.

References:

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