



Tuberculosis: Lessons yet to be learned.

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Introduction:

Tuberculosis is a multi-system infection with insidious onset that could mimic or coexist with various diseases.

Such diverse clinical presentations often result in diagnostic challenges and delays.

We herein present an example.

Case presentation:

A 35-year-old man, with no medical history, presented with weight loss and painful facial papules and nodules.

His physical examination revealed the presence of bilateral enlarged cervical lymph nodes and diffuse subcutaneous nodules.



- Cervical Ultrasound - Hypoechoic heterogeneous left upper jugular lymph node, measuring 45mmx18.6mm.



He had increased serum level of inflammatory markers. Otherwise, routine blood tests were within normal range. Chest X-Ray was normal. Tuberculin Skin test showed a phlyctenular reaction of 3 cm. Sputum testing for tuberculosis was negative.

CT-TAP showed a heterogeneous spleen and liver with liver perfusion abnormalities, a partial portal vein thrombosis and multifocal renal infarctions. The patient had no abdominal pain nor swelling.

Heart ultrasound ruled out endocarditis. Holter monitoring showed no arrhythmia.

Screening for thrombophilia and antiphospholipid antibodies was negative.

JAK2 mutation and homocysteine tests were negative. Cryoglobulin test was positive for IgG, IgA and IgM.

Cutaneous biopsy showed granulomatous hypodermic lesions with necrosis and signs of vasculitis and thrombosis. Cervical lymph node biopsy showed epithelioid cell granuloma with necrosis.

The patient was diagnosed with cutaneous, lymph node, spleen and liver Tuberculosis, complicated by cryoglobulinemia vasculitis affecting the portal vein and renal arteries.

He received 6 months of fixed-dose combination antituberculosis therapy.

Within the first two months of anti-tuberculosis drugs, the papules, nodules and the swollen lymph nodes fully disappeared.

Within 6 months, CT showed repermeabilization of the portal vein and disappearance of the renal infarctions. Cryoglobulin test became negative.

Discussion:

- ❖ Cutaneous TB is an underestimated mode of revelation of TB [1], and that is largely due to its diverse clinical manifestations and to the multitude of its differential diagnoses [2].
- ❖ The prevalence of deep vein thrombosis (DVT) in TB seems to be underreported [3]
- ❖ According to some studies, it varies between 1.3% and 5.8% [4].
- ❖ The link between TB and deep vein thrombosis is well established: "TB is an inflammatory disease associated with activation of the coagulation cascade: More specifically, increased levels of fibrinogen, factor VIII, PAI-1, and decreased antithrombin III and protein C levels have been reported in the plasma of TB patients. Most of these parameters went back to normal on the thirtieth day of TB treatment." "Additionally, TB infection induces enlargement of lymph nodes that may result in compression of veins, which in combination with patients' bed rest leads to the stagnation of blood." [5]
- ❖ Thus screening for DVT in TB patients should be considered.

Conclusion:

- Tuberculosis is a multifaceted disease that could potentially cause vasculitis, notably mixed cryoglobulinemia which may disappear after appropriate anti-tuberculosis therapy, as it occurred in our patient.
- Physicians should consider tuberculosis when clinical presentation is unusual, especially in endemic countries.

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