



## Case Illustrated

## Disseminated mycobacterium tuberculosis: Pulmonary and musculoskeletal infections in a previously healthy man



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## ABSTRACT

Chest wall masses are an uncommon result of *Mycobacterium tuberculosis* (MTB) infection especially in immune-competent patients. Herein, we report a case of 47-year-old previously healthy man who presented with an anterior chest wall mass, along with a swelling of the left fourth finger. MTB was recovered from the patient's sputum and from the aspirate of the chest wall mass. Four anti-tuberculous drugs for 2 months then 2 drugs for 7 months resulted in complete resolution of both masses with no need for surgical resection.

**Conclusion:** MTB can present in disseminated form in a healthy man and treated with quadruple anti-tuberculous medications without surgical intervention.

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Musculoskeletal tuberculosis is a rare manifestation of *Mycobacterium tuberculosis* (MTB) infection and occurs in 1–3% of MTB patients [1]. However chest wall MTB, a rarer entity, constitutes only 0.25–5% of all musculoskeletal tuberculosis [2]. Herein we report a case of anterior chest wall tubercular cold abscess associated with joint and pulmonary infections.

A 46-year-old previously healthy man presented with seven months history of weight loss, fever, night sweats and episodic whitish blood streaked sputum. He noted a gradual left infraclavicular bulging mass as well as swelling and redness in the left fourth finger. Physical examination revealed a 10 cm × 8 cm × 2 cm soft, non-tender, not warm swelling in the left mid infraclavicular area (Fig. 1) with no overlying skin changes. Localized erythematous swelling around the proximal phalanx of the left fourth finger was also noted (Fig. 2). Computer assisted tomography of the chest demonstrated a left subcutaneous cystic mass, anterior mediastinal pockets with bilateral extensive parenchymal destruction (Fig. 3).

Fine needle aspirate from the chest wall mass revealed a yellow purulent fluid that grew MTB three weeks later. Sputum culture was also positive for MTB. Purified protein derivative (PPD) skin test was positive (18 mm induration) and human immunodeficiency test was negative. The patient was started on isoniazid, rifampicin, ethambutol and pyrazinamide daily for 8 weeks,

followed by isoniazid and rifampicin daily for 7 months. On follow up, 2 months later, clinical improvement was noted, with complete resolution of the chest wall mass and the left finger swelling at the end of treatment (Figs. 4 and 5).

Our case responded completely to medical treatment. There was no need for surgical intervention that might be necessary in refractory or severe cases.



**Fig. 1.** A 10 × 8 × 2-cm soft bulge with no overlying skin changes in the left mid infraclavicular area.

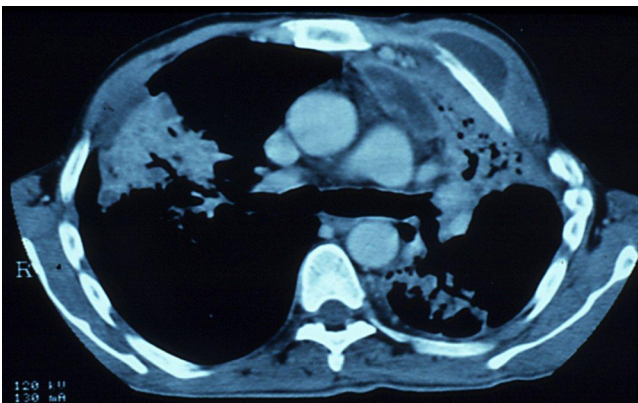
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**Fig. 2.** Erythematous swelling over the proximal phalanx of the left fourth finger.



**Fig. 5.** Complete resolution of the erythematous lesion over the left proximal phalanx (black arrow).



**Fig. 3.** Enhanced CT-Chest showing left anterior subcutaneous collection (red arrow) with multiple parenchymal destructions (red arrow heads).



**Fig. 4.** Normal looking left anterior chest wall after 6 months of antituberculous treatment.

Chest wall tuberculosis should be considered in areas of high MTB incidence even in an immunocompetent patient because of major morbidity and mortality associated with untreated cases.

**References**

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