

Images in Infectious Diseases

Pott disease: Vertebral Tuberculosis

Libardo Valencia Chicué^{[1],[2]}, Indalecio Carboni Bisso^{[1],[2]} and Marcos Las Heras^[1]

[1]. Hospital Italiano de Buenos Aires, Terapia Intensiva de Adultos, Buenos Aires, Argentina.

[2]. Sanatorio Franchin, Terapia Intensiva de Adultos, Buenos Aires, Argentina.

A 25-year-old man with no medical record but a history of recent imprisonment before consultation was hospitalized for acute lower limb paresthesias and severe back pain. His relatives reported that he had presented with asthenia, weight loss, and dry cough with intermittent episodes of hemoptysis in the last five months.

A physical examination revealed evidence of thoracic kyphosis and pain on superficial palpation (**Figure 1**). A chest computed tomography reported vertebral destruction at T10 and T11 with displacements of bone fragments towards the medullary canal (**Figure 2**). In addition, multiple pulmonary caverns were detected (**Figure 3**). Later, a diagnosis of disseminated tuberculosis with pulmonary and vertebral compromise (Pott disease) was made, and concomitant immunosuppression was ruled out. Vertebroplasty and fixation were planned as the bone cultures were positive for *Mycobacterium tuberculosis*. He received treatment with isoniazid, pyrazinamide, rifampicin, and ethambutol for six months after which he had an adequate clinical response.

In general, skeletal muscle involvement occurs in 10 to 35% of cases of extrapulmonary tuberculosis¹, with the lower thoracic and upper lumbar vertebrae being more frequently affected. Kyphosis carries a high risk of spinal compression as it results in neurological disorders such as paresthesias, paresis, and even paraplegia². Diagnostic confirmation is made by biopsy along with clinical and radiological findings. Usually, the use of tuberculostatic drugs along with adequate nutritional support is the cornerstone of treatment, showing clinical improvement in up to 90% of cases treated in a multimodal manner³.



FIGURE 1: Thoracic kyphosis.

Corresponding author: Indalecio Carboni Bisso.

e-mail: indalecio.carbonibisso@hospitalitaliano.org.ar

 <https://orcid.org/0000-0002-4834-4676>

Received 21 July 2020

Accepted 17 August 2020

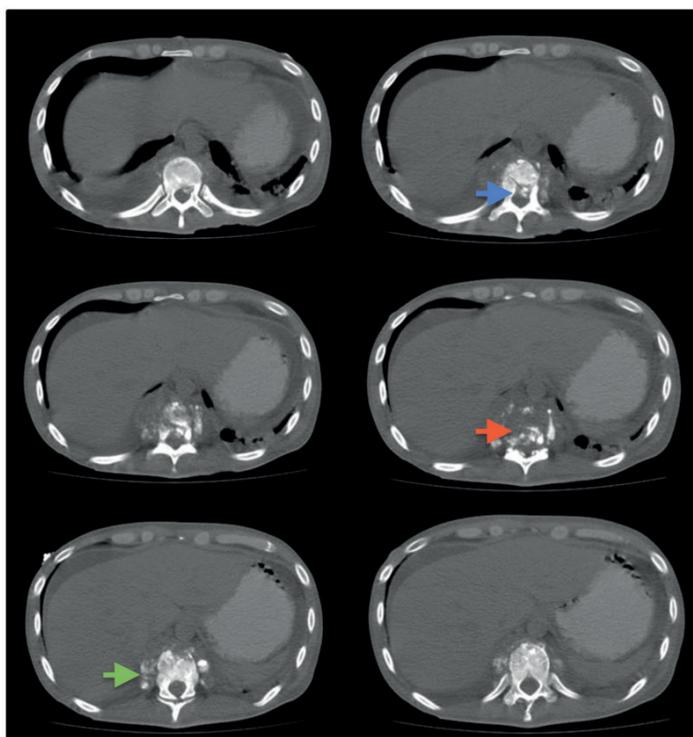


FIGURE 2: Chest CT scan: T10 and T11 vertebral destruction (red arrow) with a thickening of the paravertebral soft tissues (green arrow) and the displacement of bone fragments into the medullary canal (blue arrow).

ACKNOWLEDGMENTS

The research team wants to thank Maria de los Ángeles Magaz and Ana Paula Gallardo for their valuable collaboration in this work.

AUTHORS' CONTRIBUTION

LVC: Conception and design of the study, Acquisition of data; Analysis and interpretation of data; Drafting the article. ICB: Conception and design of the study, Analysis and interpretation of data, Drafting the article. MLH: Final approval of the version to be submitted.

CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest.

REFERENCES

1. Sharma SK, Mohan A. Extrapulmonary Tuberculosis. *Mycobacterium tuberculosis*: Molecular Infection Biology, Pathogenesis, Diagnostics and New Interventions. 2019; 37–53.

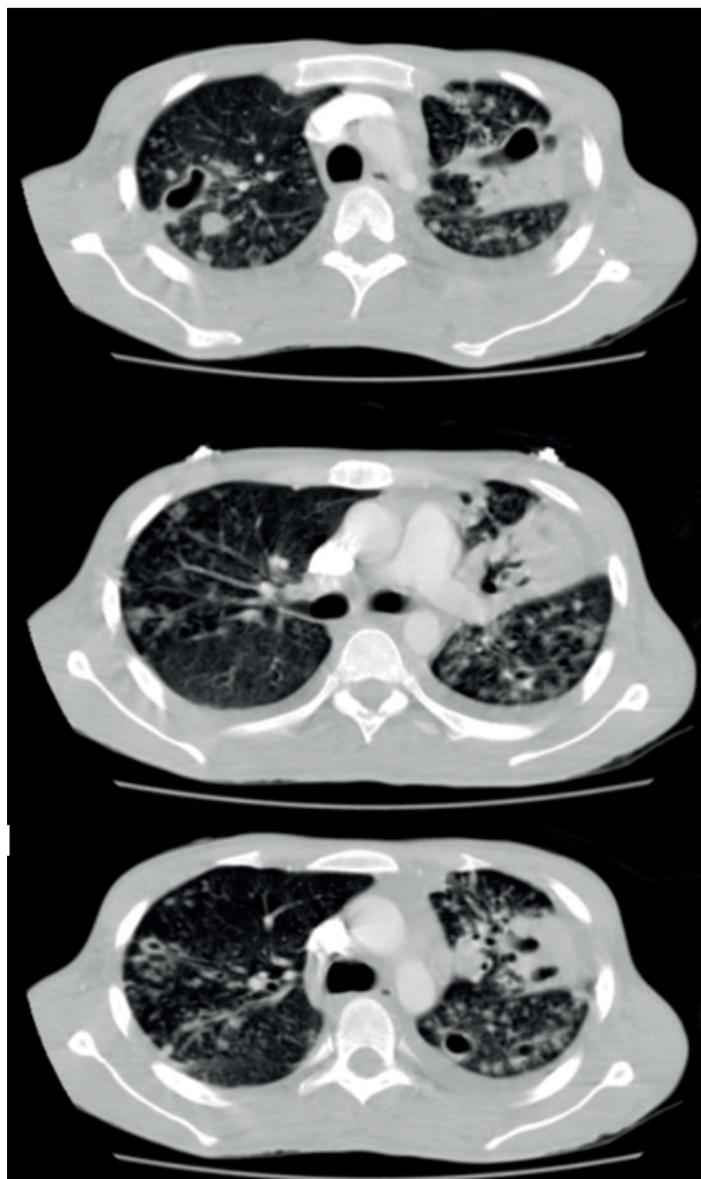


FIGURE 3: Chest computed tomographic scan showing thick-walled cavitated lesions in the upper lobes.

2. Colmenero JD, Ruiz-Mesa JD, Sanjuan-Jimenez R, Sobrinho B, Morata P. Establishing the diagnosis of tuberculous vertebral osteomyelitis. *Eur Spine J.* 2013;22(Suppl 4):579–86.

3. Sterling TR, Njie G, Zenner D, Cohn DL, Reves R, Ahmed A, et al. Guidelines for the Treatment of Latent Tuberculosis Infection: Recommendations from the National Tuberculosis Controllers Association and CDC, 2020. *MMWR Recomm Rep.* 2020;69(1):1–11.