

Importance of early recognition and treatment of tuberculous aortitis

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Abstract

Tuberculous aortitis is difficult to diagnose, but early treatment may limit the progression of tuberculosis aortitis, which may cause aortic stenosis or pseudoaneurysm formation if untreated. We provided antituberculous therapy on suspicion of tuberculous aortitis, despite the lack of definitive diagnosis, and obtained a favorable outcome.

Clinical Image

Title: Importance of early recognition and treatment of tuberculous aortitis

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Abstract

Tuberculous aortitis is difficult to diagnose, but early treatment may limit the progression of tuberculosis aortitis, which may cause aortic stenosis or pseudoaneurysm formation if untreated. We provided antituberculous therapy on suspicion of tuberculous aortitis, despite the lack of definitive diagnosis, and obtained a favorable outcome.

Keywords: tuberculous aortitis, tuberculosis, aortitis; antituberculous therapy

A 22-year-old man from Nepal presented with a one-month history of fever and weight loss. He had no previous history of illness or medication use. Apart from an elevated serum C-reactive protein level (1.40 mg/dL), his physical examination and laboratory test results were unremarkable. Contrast-enhanced computed tomography (CT) showed a pericardial effusion, mediastinal lymphadenopathy, mild right lower-lobe lung consolidation, and ascending aortitis (Fig. 1a–c). The T-SPOT.TB test result was positive. Bronchoalveolar lavage and mediastinal lymph node biopsy were performed because of suspected active tuberculosis. Although the tuberculous culture and polymerase chain reaction tests for *Mycobacterium tuberculosis* were negative, we commenced treatment with isoniazid, rifampicin, pyrazinamide, ethambutol, and prednisolone (60 mg/day, tapered weekly). Two months later, the patient's body temperature and weight normalized, so ethambutol, pyrazinamide, and prednisolone were discontinued. Isoniazid and rifampicin were continued for an additional 7 months. After 9 months of treatment, contrast-enhanced CT showed resolution of the aortitis (Fig. 1d), pericarditis, mediastinal lymphadenopathy, and lung consolidation. Early therapy may limit the progression of tuberculosis aortitis, which may cause aortic stenosis or pseudoaneurysm formation if untreated,¹ so we commenced drug therapy despite the lack of a definitive diagnosis, and obtained a favorable outcome.

Author contributions

All authors had access to the data and a role in writing this manuscript. The authors fulfill the ICMJE Criteria for Authorship. Yoshihiro Nakamura wrote the initial draft. Kazuhiro Asada, Masashi Toyama, and Yoshiro Fujita reviewed the manuscript and provided critical intellectual input. All authors read and approved the submitted draft of the manuscript.

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Figure caption

Figure 1. Contrast-enhanced chest computed tomography images showing ascending aortitis (a–c red arrows) and the subsequent resolution of aortitis (d) after 9 months of antituberculous treatment.

