Aortic Aneurysm Secondary to TB Aortitis Due to TB-Induced Inflammation of the Vasa Vasorum: A Case Series

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INTRODUCTION: Tuberculous aortitis is a rare entity with that is indicative of disseminated tuberculosis. An aortic aneurysm is a pathologic segment of the aorta that is at least 50% greater than expected for the same age group. It is rare for a tuberculosis to be the cause of the aneurysm.

CASE PRESENTATION: A 58-year-old Filipino, was referred due to dilated aortic aneurysm. CT-aortogram revealed multiple saccular aneurysm from subclavian artery, dissection at the distal abdominal aorta. He underwent thoracic aortic aneurysm repair. Histopathology of the aortic wall revealed granulomatous disease with central necrosis. Culture of aortic wall revealed presence of Mycobacterium tuberculosis. A 59-year-old Filipina, came in with 1 week history of chest pain. CT aortogram revealed contained rupture at the distal ascending aorta with thrombus; with massive pericardial effusion. TB quantiferon assay and PPD revealed positive result. She was started with tuberculosis chemotherapy. She eventually became afebrile. She underwent TAA repair. Histopathology of aortic wall revealed granulomatous lesion with no necrosis. A 65-year-old Filipina, came in due to chest pain radiating to back. Chest CT scan with contrast revealed descending thoracic aortic aneurysm with dissection. TAA was done. Histopathology of aortic tissue revealed cystic medial degeneration with dissection with chronic granulomatous infection, to consider infectious etiology. TB interferon assay revealed positive result.

DISCUSSION: There is still no established guideline for the management of tuberculous aortitis. We should have high clinical suspicion for diagnosis of tuberculous aortitis. Early treatment with antituberculosis chemotherapy, in conjunction with surgical correction will result to better outcome. However, it was noted that advance age, thoracic location of aneurysm is associated with increase mortality.

CONCLUSIONS: TB of the aorta is diagnosed through demonstration of granulomas with giant cells. Culture of the organism and TB quantiferon would make a stronger basis for anti-tuberculosis treatment. It is important to consider of Tuberculous aortitis as a differential diagnosis of fever of unknown origin in patients who have atherosclerosis.


DISCLOSURE: The following authors have nothing to disclose: Johnson See

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