

Pulsatile Swelling of Chest

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A 65 year male presented with right-sided chest swelling in the upper parasternal area for 6 months. The swelling was increasing in size gradually. There were no complaints of dyspnea, cough or hoarseness of voice. On examination, there was a pulsatile lump in the right infraclavicular area (Fig. 1). Cardiovascular system examination was normal. Chest X-ray revealed a widening of the mediastinum. Transthoracic echocardiography was done, followed by transesophageal echocardiography (TEE). It showed evidence

of an aneurysm of ascending aorta (Fig. 2). There was a history of untreated syphilis in the patient. A positive Venereal Disease Research Laboratory (VDRL) test and Treponema pallidum hemagglutination (TPHA) assay were found, suggesting that the patient had tertiary syphilis. After penicillin G therapy, the patient underwent successful surgical repair. Pathological findings also confirmed syphilitic aortitis.

Historically, 5–10% of all cardiovascular fatalities were attributable to cardiovascular syphilis; however, today, syphilis is only occasionally discovered at the autopsy table. Latent periods range from 5 to 40 years, with 10–25 years being normal. Syphilitic aortitis, syphilitic aortic aneurysm, syphilitic aortic valvulitis with aortic regurgitation, and syphilitic coronary ostial stenosis are the four subtypes of syphilitic heart disease.

The number of reported instances of human immunodeficiency virus infection has increased recently, according to epidemiologic reports.^{1,2} The identification is challenging due to the rarity of this

aetiology, primarily because syphilis testing is not commonly done. When compared to treponema-specific tests in late syphilis like the TPHA, micro hemagglutination test, and fluorescent treponemal antibody absorption test, nontreponemal tests like the VDRL test and rapid plasma reagin test are less accurate (71–73%) vs (94–96%).^{3,4} Syphilitic serological testing is advised in cases of aortic aneurysm, especially in younger patients. Aortic aneurysms can only be repaired surgically, which entails resection of the dilated segment of the aorta and replacing it with a synthetic vascular graft.⁵ Surgery should be performed concurrently if substantial coronary disease or aortic regurgitation is present.

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Fig 1: Swelling on the right side of the chest

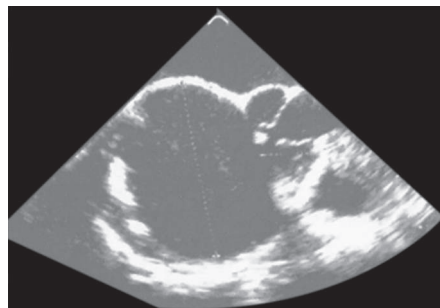


Fig 2: Transesophageal echocardiography (TEE) showing aneurysm of ascending aorta