Giant aneurysm of right sinus of valsalva in a HIV-infected patient with extrapulmonary tuberculosis

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DESCRIPTION

A 46-year-old male patient admitted with fever, cough, chest pain and dyspnoea during the past

7 days. He had a history of unprotected sexual exposure and was previously undiagnosed for HIV infection. Chest X-ray revealed bilateral pleural

Figure 1 (A and B) The aortic short axis view showed a dilated and aneurysmal ascending aorta and the apical five chamber view showed the presence of pericardial effusion, mostly at the left ventricular (LV) apex; (figure 1-F) CT aortogram and 3D reconstructed images showed a giant aneurysm at the right sinus of valsalva (7.1×8.5 cm) with a clot inside.

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effusion along with cardiomegaly. ECG showed sinus tachycardia with low-voltage complex. Blood investigation revealed haemoglobin-10.4 g/dL, total leucocyte count 8600/mm³, platelets 215 000/mm³ with normal liver and renal function test. 2D echocardiography demonstrated moderate pericardial effusion, normal biventricular function with dilated and aneurysmal ascending aorta and mild aortic regurgitation (figure 1A,B). Pleural fluid aspiration showed straw coloured fluid with total cell count 600 (lymphocytic), exudative and very high adenosine deaminase level (ADA 86 U/L). Serological investigation confirmed the presence of HIV infection. The patient was started on antitubercular therapy. CT aortogram confirmed the presence of a giant (7.1×8.5 cm) aneurysm of the right sinus of valsalva (figure 1C–F). The patient was unwilling to undergo surgery of the aneurysm of the right sinus of valsalva.

The differential diagnosis of the aneurysm of the sinus of valsalva could be Marfan's syndrome, vasculitis due to tuberculosis, syphilis and other infectious agents, rheumatological diseases and HIV-associated vasculitis.¹ Only few cases of aneurysm of the aorta due to HIV infection have been reported in the literature and the histopathology of the resected aorta revealed a granulomatous giant cell mesoarteritis.^{2 3} So far this is the biggest aneurysm associated with HIV.

Learning points

- ▶ HIV-associated vasculitis rarely involves the sinus of valsalva-causing aneurysm.
- ▶ The differential diagnosis of aneurysm of the sinus of valsalva could be Marfan's syndrome, vasculitis due to tuberculosis, syphilis and other infectious agents, rheumatological diseases and HIV-associated vasculitis.
- ▶ Histopathology of the resected aorta usually revealed a granulomatous giant cell mesoarteritis.

Competing interests None.

Patient consent Obtained.

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