

Clinical Image

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Unruptured sinus of valsalva aneurysm larger than the heart itself

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Clinical image description

A fifty-six year old Caucasian male was referred for a radiological evaluation from the gastroenterologist. The main complaint was a heartburn sensation while lying in the supine position that was not responding to antacids. Furthermore and only recently, the patient noted a pulsatile mass below the sternum that was not increasing in dimensions.

Following the clinical suspicion of a hiatal hernia, a thoracoabdominal CT scan was performed. A vascular structure communicating with the left ventricle (through a connective channel measuring 32 millimeters), as well as with the right atrium (through a connective channel measuring 9 millimeters) was noted (Figure 1a and 1b).

The structure contrasted normally in the enhanced phase and was rather irregular in its form, with a maximum dimen-

sion reaching 110 millimeters axially (Figure 2a and 2b). Of note were the normal dimensions of the ascending and descending aorta, as well as its uniform and regular contrasting during the entire intrathoracic trajectory.

After the imaging study, the patient was suggested a cardio-surgical consultancy. He ruled out the option of any intervention, and agreed to monitor the condition through yearly imaging studies; should the clinical condition allowed for such a stance.

Sinus of Valsalva aneurysms are a rarity and often present incidentally during cardiac or thoracic imaging studies [1]. Open surgery repair has been the treatment of choice, but transcatheter techniques have been as well proposed [2].

Echocardiography is accurate, although recently computerized tomography and magnetic resonance imaging have shown diagnostic advantages [3,4].

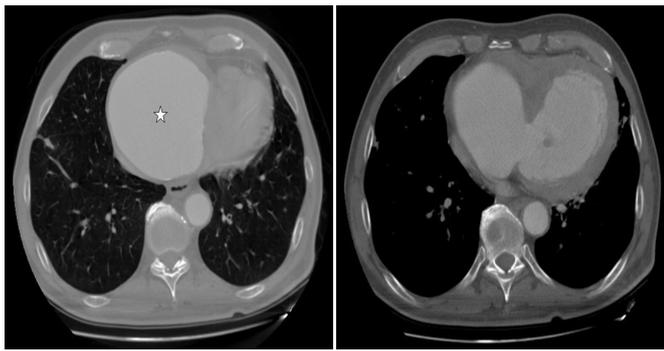


Figure 1: (1a) Left inset: note the huge unruptured, aneurysmal structure (white star). (1b) Right inset: connecting U-shaped aneurysm.



Figure 2: (2a) Left inset: reconstruction images, denoting a parallel oval structure adjacent to the heart itself. (2b) Right inset: heart and aortic structures view from a different angle, with the irregular aneurysmal structure (white arrow) originating from the sinus of Valsalva.

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