

<b>Case</b>	(757) Aneurysm of the coronary sinus as a cause of acute coronary syndrome.
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## CASE PRESENTATION

A 68-year-old patient with a aortic mechanical valve prosthesis attended the emergency room with compressive centrotoracic pain. It didn't worsen with the activity nor relieve with the rest, and improved slightly with cefinitrine.

Troponins elevation were found, and ECG showed a high-risk non-ST elevation acute coronary syndrome (NSTEMI), and emergency coronary angiography was demanded. The coronary angiography revealed a normal left coronary, but due to the impossibility of catheterization of right coronary and the suspicious of an anatomy anomaly in its origin, an urgent angio-CT was demanded.

The CT angiography showed an aneurysm/ pseudoaneurysm of the valsalva sinus of the right coronary artery, with origin contacting with aortic valve prosthesis, and including the origin of right coronary artery.

The wall of the aneurysm presented a thickening in its most declining portion, suggesting either a history of aortitis or true aneurysm wall. Right coronary artery was permeable, ran parallelly with wide contact to sternum, and was compressed by the aneurysm, regarding this as the etiology of his NSTEMI.

There was also infrasthmic coarctation of descending thoracic aorta, below the origin of the left subclavian artery

## DISCUSSION

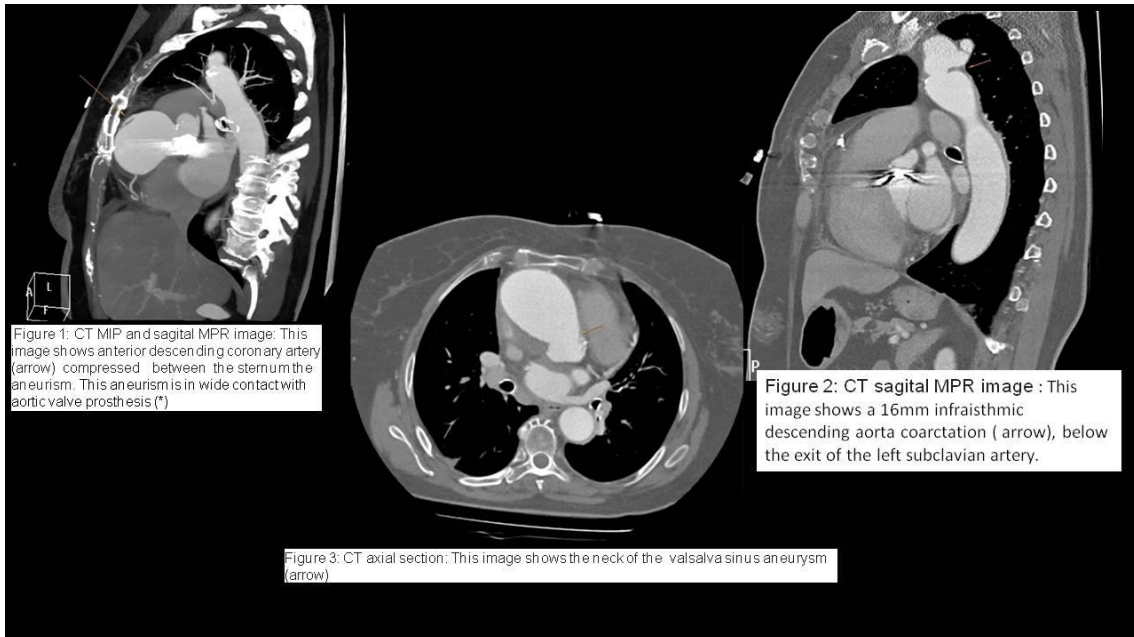
A Valsalva sinus aneurysm is a very rare cardiac anomaly. Most cases are due to a congenital disruption in the middle layer of the aorta, septal defects or valvulopathy, even though the etiology may be sometimes sporadic.

It usually remains silent until it ruptures, regarding other occasions where it can cause other clinical situations, like an obstruction to the flow in the right ventricle, aortic insufficiency, rhythm disorders or a more uncommon condition such as myocardial ischemia or necrosis (1)

Angio-CT should be considered in prime line in this emergency, being the fastest technique in obtaining images and 3D reconstruction of the aorta. Its findings may help to make the differential diagnosis between ascending aortic aneurysm with its different etiologies (aortitis, traumatism...) and its complications (aortic dissection) as well as other causes of mediastinum masses (1,2).

## CONCLUSION

The finding of a valsalva sinus aneurysm is a rare diagnosis and it must be taken into account in acute thoracic pain. Urgent CT angiography could be very useful in its diagnosis.



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