

Case	(723) Acute coronary syndrome by extrinsic compression of the left main coronary artery
Authors	
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CASE PRESENTATION

64 year-old woman is admitted to the emergency room with dyspnea, tachypnea and an oxygen saturation value of 86%. She presents with interscapular pain irradiating to the shoulders, occasional nausea and progressive dyspnea at rest, with no fever. In the last 20 days, the patient referred non irradiated chest pain relieved by rest. Electrocardiogram shows ST depression in V2 to V6 leads. Thorax CT rules out pulmonary embolism and acute aortic syndrome, but shows a probable interatrial communication with associated pulmonary hypertension signs and secondary pulmonary involvement with a mosaic pattern, thickening of the septa and pleural effusion. Findings suggest heart failure with mismatch of ventilation-perfusion. After stabilization of the patient, troponin is assessed serially. Progressive troponin rises up to 13 ug/l Coronary Angiography and Cardio-CT is requested.

Neither coronary angiography nor cardio-CT identified stenosis or endoluminal lesions that justified the serial increase of troponin. Therefore, findings are not explained by an acute coronary syndrome due to endoluminal atherothrombosis. However, an extrinsic compression of the left main coronary artery was observed in the exit from the left coronary sinus due to the great growth of the pulmonary artery. No other relevant, unknown findings were seen.

DISCUSSION

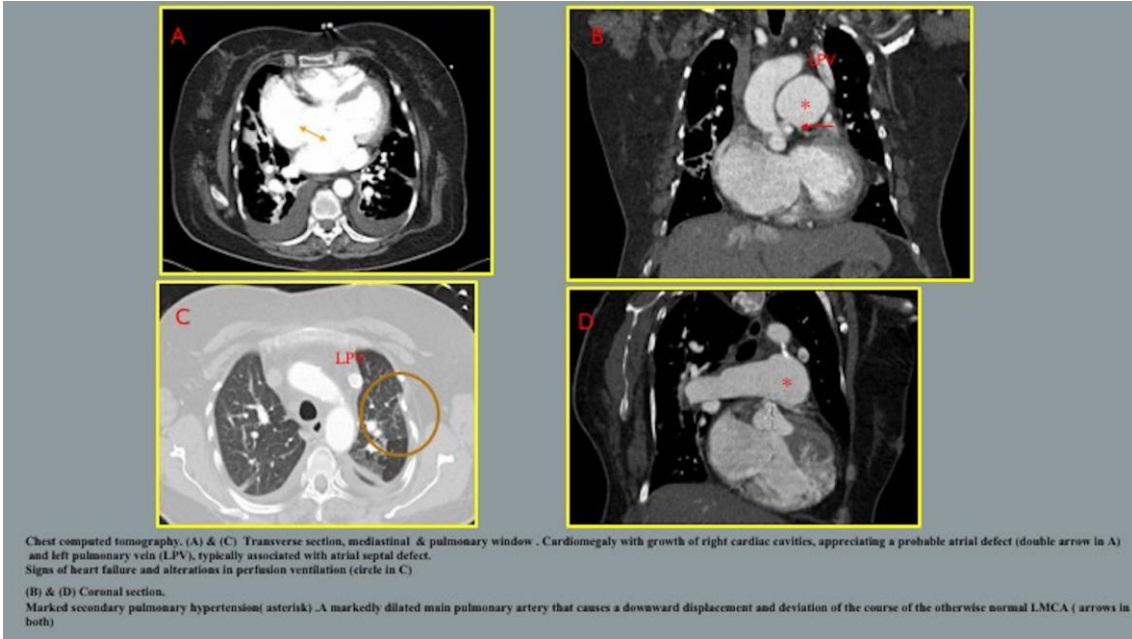
The extrinsic compression of the LMCA can be recognized retrospectively in the thorax CT performed in the emergency department. Clinic of angina is masked by the dyspnea associated with pulmonary hypertension. CT has ruled out dissection of aorta & pulmonary arteries and also pulmonary embolism. There are no cardiac abnormalities suggesting a tako-subo (the age and the clinic of the woman forced to discard it)

Neither clinical nor imaging findings suggestive of myocarditis are appreciated.

CONCLUSION

Extrinsic compression of the coronary arteries is a rare cause of angina or myocardial infarction. In this context, the most frequently reported cause is pulmonary hypertension

In cases of marked pulmonary hypertension, it is necessary to see correctly the possible coronary compression and warn clinicians as soon as possible



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