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Clinical case

Simultaneous transfemoral TAVI and angioplasty of unprotected trifurcated left main coronary artery

Procedimientos simultáneos de TAVI transfemoral y angioplastia de tronco común trifurcado no protegido

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CASE PRESENTATION

Eighty-two year-old-woman with a past medical history of high blood pressure, dyslipidemia, primary hypothyroidism, iron deficiency anemia, chronic renal disease, a glomerular filtration rate of 52 mL/min, an episode of ischemic colitis resolved using conservative therapy 2 years ago and documented peripheral arterial disease with carotid artery atheromatous plaque without significant stenosis.

The patient showed long-term degenerative aortic valve disease with double aortic lesion with severe stenosis (mean flow velocity, 4.1 m/s; mean gradient, 42 mmHg; valve area, 0.98 cm^2) and mild-to-moderate regurgitation, with preserved left ventricular ejection fraction, and symptomatic in class II of the New York Heart Association for dyspnea. The patient complained of episodes of non-exertional angina for which she required several hospital admissions over the last few months.

The coronary angiography revealed coronary artery disease of the left main coronary artery and 2 vessels: calcified and elongated left main coronary artery with a borderline significant distal lesion affecting the bifurcation with the anterior descending coronary artery, 2 ramus medianus and the circumflex coronary artery; the anterior descending coronary artery with a severely calcified ostial lesion, first and second ramus medianus with significant calcified ostial lesions, and circumflex coronary artery with a moderate ostial lesion (figure 1,

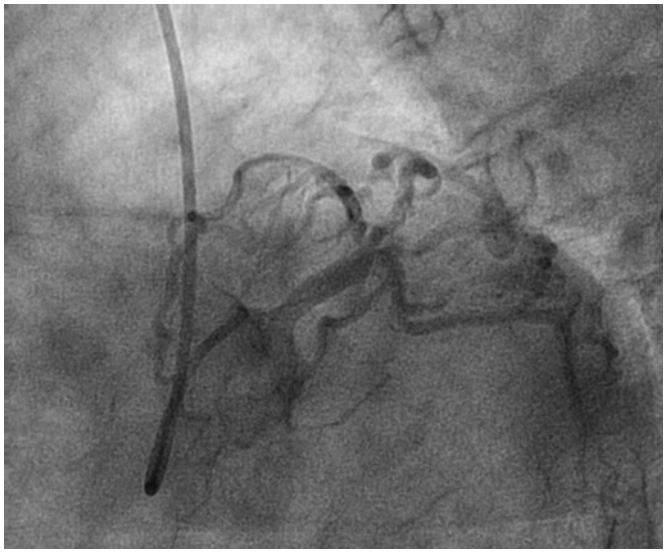

Figure 1. Coronary angiography in caudal left-anterior-oblique view showing significant distal left main coronary artery disease with damage to the anterior descending coronary artery and two intermediate branches.

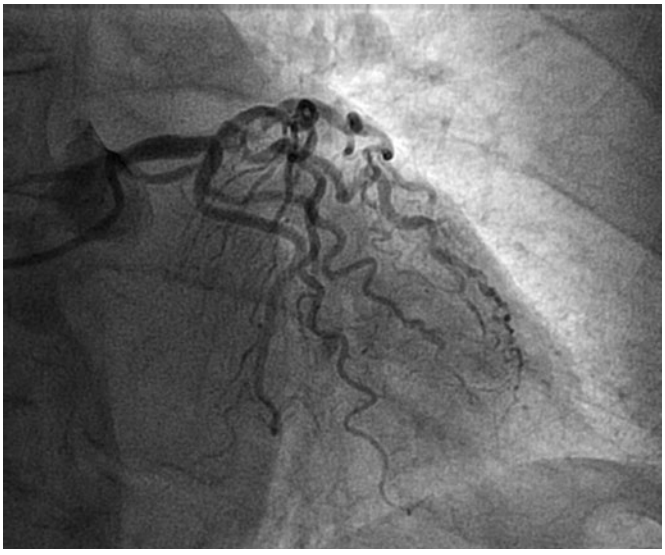

Figure 2. Coronary angiography in caudal right-anterior-oblique view.

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figure 2 and video 1 of the supplementary data) with a narrow-caliber and short distal vessel. The aortogram showed a calcified tricuspid aortic valve with limited opening of the leaflets and mild aortic regurgitation and nondilated aortic regurgitation root and ascending aorta without significant atheromatosis (figure 3 and video 2 of the supplementary data). The arteriography of the lower limbs showed a non-calcified, non-tortuous iliac-femoral axis with a minimum diameter of 7.3 mm in the right common femoral artery and a minimum diameter of 7.7 mm in the left common femoral artery. The short-term risk according to the Society of Thoracic Surgeons was 10.79%.

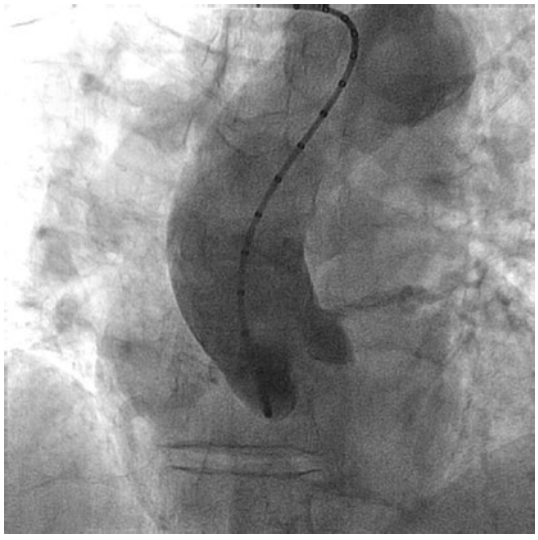

Figure 3. Aortogram showing one tricuspid aortic valve with moderate calcification of the leaflets, nondilated aortic root and ascending aorta without significant atheromatosis.

SUPPLEMENTARY DATA

Supplementary data associated with this article can be found in the online version available at https://doi.org/10.24875/RECICE.M19000047.

Simultaneous transfemoral TAVI and angioplasty of unprotected trifurcated left main coronary artery. How would I approach it?

Procedimientos simultáneos de TAVI transfemoral y angioplastia de tronco común trifurcado no protegido. ¿Cómo lo haría?

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HOW WOULD I APPROACH IT?

This is a a challenging case that combines severe coronary artery disease of trifurcated left main coronary artery and severe aortic stenosis in an elderly female patient with chronic kidney disease.

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