Acute coronary syndrome in a patient with a history of ascending thoracic aortic surgery using the Cabrol technique

Gabriel E. Pérez Baztarrica
Department of Cardiology and Physiology, University Hospital, Universidad Abierta Interamericana, Faculty of Medicine, Buenos Aires, Argentine

This is the case of a 73-year-old male patient referred from another facility and diagnosed with non-ST elevation acute coronary syndrome admitted for cinecoronariography (CCG) and eventual angioplasty. The patient had a history of blood hypertension, smoking, and dyslipidaemia, as well as severe aortic stenosis and ascending aortic aneurysm. The patient underwent mechanical aortic valve replacement of the ascending aorta with coronary re-implantation into the aortic tube (conventional Cabrol surgery). DDDR pacemaker implantation due to asymptomatic bradyarrhythmia. Upon admission, the patient experienced angina pectoris symptoms (HR 70 bpm, BP 160/80 mm Hg). The electrocardiogram showed lower negative ST and T depression. As regards the enzyme curve, peak creatinine phosphokinase (CPK) was 680 U/L and CPK-MB 76 U/L (upon admission). The CCG showed the Cabrol surgery graft, critical blockage of the right coronary artery (RCA) proximal anastomosis, and left coronary artery with no significant angiographic lesions (Fig. 1A). Considering the patient’s clinical condition and the CCG results, RCA stent angioplasty was performed (Fig. 1B). The patient progressed with no symptoms during hospitalisation and had no complications. The Cabrol technique includes replacement of the ascending aorta and aortic valve using a composite graft. Anastomotic complications related to the Cabrol technique have also been reported. These lesions have usually been managed surgically although some reported cases have been managed by percutaneous coronary intervention.

Figure 1. A. Cinecoronariography projection showing medial Dacron graft connection to the descending aorta and distal ends anastomosis to the right coronary artery (RCA) and left coronary artery (LCA). The RCA had a critical lesion in the proximal anastomosis; B. Proximal RCA anastomosis after angioplasty. Mechanical valve in the aorta (AV)