Acute coronary syndrome and endocarditis 20 years before: how do they match?

Silvia Ribeiro1*, Mário Jorge Amorim2, Márcia Torres1, Jorge Almeida2, and Nuno Bettencourt3

1Department of Cardiology, Hospital de Braga, Largo Carlos Amarante - Apartado, 2242 Braga, Portugal; 2Department of Cardiothoracic Surgery, S. João Hospital, Porto, Portugal; and 3Department of Cardiology, Vila Nova de Gaia/Espinho Hospital, Vila Nova de Gaia, Portugal

* Corresponding author. Tel: +35 1915301635, Email: silviamartinsribeiro@gmail.com

A 33-year-old woman with a past history of mitral infective endocarditis in childhood was admitted to our department due to unstable angina. Transthoracic echocardiography (TTE) showed posterior mitral leaflet prolapse originating severe regurgitation and coronary angiography revealed an 80% stenosis of the proximal segment of left anterior descending artery (LAD). During the angioplasty procedure a calcification near the coronary lesion was found (Panel A). The cardiac magnetic resonance demonstrated two mycotic aneurysms, one at the anterior wall of the left ventricular outflow tract (LVOT) (Panel B) and a smaller one at the submitral area, in left ventricle antero-lateral wall (Panel C). A multislice computed tomography showed a LVOT aneurysm with a heavily calcified wall, causing residual compression of the proximal portion of LAD (Panels D–F). Considering the patient remained asymptomatic, myocardial perfusion scintigraphy was normal and the technical difficulty of aneurysm excision, only closure of the aneurysms and mitral valve repair were programmed. Intra-operative transesophageal echocardiography confirmed the P1 prolapse and showed two regurgitant jets, one occurring trough the body of the posterior leaflet and the other one at the coaptation zone at the level of P1 scallop. Real-time three-dimensional transesophageal echocardiography delineated the P1 prolapse and the two aneurysms (Panels G and H). The perforated P1 scallop was ressected (Panel I), mitral annuloplasty was performed and the aneurysms were excluded with pericardial patches. At 6-month follow-up the patient remained asymptomatic and maximum treadmill stress test was negative for ischaemia.