



Figure 2. Left coronary angiogram; systolic occlusion of the distal segment of the left anterior descending coronary artery



Figure 4. Right coronary angiogram; systolic occlusion of the right ventricular branch



Figure 3. Left coronary angiogram; normal diameter of the left anterior descending coronary artery in diastole



Figure 5. Right coronary angiogram; normal diastolic diameter of the right ventricular branch

Given these findings, coronary angiography was performed before the mitral valve replacement surgery. The left coronary angiogram showed complete systolic occlusion of the distal segment of the left anterior descending coronary artery (LAD) without atherosclerotic lesion which was recovered in the diastolic stage (Figs. 2, 3). The right coronary angiogram showed complete systolic occlusion of the proximal segment of the right ventricular branch of the right coronary artery without atherosclerotic lesion which was recovered in the diastolic stage (Figs. 4, 5). The left main coronary artery and left circumflex artery were normal.

The patient was referred to the cardiovascular surgery department for mitral valve replacement and myotomy operations. The mitral valve replacement, left atrial appendage ligation and myotomy operations were performed by cardiovascular surgeons. Myotomy was performed only for the myocardial bridging of the LAD because of the ischaemia in the LAD area detected by myocardial perfusion scintigraphy. The patient was discharged from hospital without any cardiac com-

plaint on a regime of warfarin, acetylsalicylic acid, diltiazem and diuretics.

Conflict of interest: none declared

Recommended references

- Arjomand H, Al Salman J, Azain J, Devendra A. Myocardial bridging of left circumflex coronary artery associated with acute myocardial infarction. *J Invas Cardiol*, 2000; 12: 431–434.
- Bauters C, Chmait A, Tricot O et al. Coronary thrombosis and myocardial bridging. *Circulation*, 2002; 105: 130.
- Garg S, Brodison A, Chauhan A. Occlusive systolic bridging of circumflex artery. *Catheter Cardiovasc Interv*, 2000; 51: 477–478.
- Gurewicz J, Gotsman MS, Rozenman Y. Right ventricular myocardial bridge in a patient with pulmonary hypertension. A case report. *Angiology*, 1999; 50: 345–347.
- Rossi L, Dander B, Nidasio GP et al. Myocardial bridges and ischemic heart disease. *Eur Heart J*, 1980; 1: 239–245.
- Tauth J, Sullebarger T. Myocardial infarction associated with myocardial bridging: case history and review of the literature. *Cathet Cardiovasc Diagn*, 1997; 40: 364–367.
- Woldow AB, Goldstein S, Yazdanfar S. Angiographic evidence of right coronary bridging. *Cathet Cardiovasc Diagn*, 1994; 32: 351–353.