Pseudoaneurysm of the ascending aorta and superior vena cava syndrome after aortic valve replacement

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Introduction: Ascending aortic pseudoaneurysm is a rare, sometimes fatal complication after aortic surgical procedures. Contrast computed tomographic scan is the investigation of choice. Transesophageal echocardiography is helpful before, during and after treatment of pseudoaneurysm. Surgical treatment of pseudoaneurysm is often considered like treatment of choice but is associated with high morbidity and mortality. Sometimes transcatheter closure may be an effective treatment in selected patients.[1,2] We describe the successful management of a pseudoaneurysm of the ascending aorta which was united with fistula between superior vena cava and aortic pseudoaneurysm.

Case report: 71-year-old male came to hospital with superior vena cava syndrome which manifested in facial swelling, neck distension, and enlarged veins of the upper chest, which developed two days before admission. One year ago, he had aortic valve replacement with biological valve, mitral valve repair, plastic of tricuspidal valve and implantation of the pacemaker. Chest computed tomography showed pseudoaneurysm dimension 85x57x65 mm on right lateral contour of the ascending aorta. The neck of pseudoaneurysm was 17 mm in diameter. In the area of dorsal contour of pseudoaneurysm sachets was communication with a vena cava superior in the sense of fistula. A transesophageal echocardiography exam shows pulsatile flow between aorta and pseudoaneurysm. After a heart time discussion, the percutaneous approach was undertaken. In the Hybrid operating room under transesophageal echocardiography and fluoroscopic guidance the Amplatzer duct occluder device was placed in the neck of pseudoaneurysm, but day after procedure control transesophageal echocardiography showed flow right next to device between pseudoaneurysm and aorta. The high velocity blood flow move Amplatzer device. Next day patients has open chest surgery with pseudoaneurysmectomy, reconstruction of ascending aorta and reparation defect of the superior vena cava. Several days after surgery the facial and neck swelling was disappeared, and patient felt better.

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LITERATURE

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