
Case Reports

Surgical Repair of a Pseudoaneurysm of the Ascending Aorta after Previous Aortic Valve Replacement and Aneurysmorrhaphy

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Abstract

We report the case of a patient with a pseudoaneurysm of the ascending aorta. He was referred to our hospital because of chest pain and dyspnea. A preoperative diagnostic evaluation revealed a large pseudoaneurysm of the ascending aorta close to the proximal anastomotic site of the graft. During surgery, the pseudoaneurysm originated from an intimal defect in the aortic wall on the right side of the right coronary artery 1cm proximal to the suture line. Replacement of the ascending aorta was successfully performed (*Iranian Heart Journal 2006; 7 (4): 57-60*).

Key words: aortic pseudoaneurysm ■ aortic root replacement ■ Bentall operation ■ ascending aorta aneurysm

Aortic root replacement is a major surgical intervention. With modern grafting techniques, the hospital mortality varies between 1.7% to 17.1%.¹⁻⁹ The intraoperative mortality is higher when the operation is performed under emergency conditions because of acute dissection.⁷ A complication after Bentall operation (aortic valve and ascending aorta replacement) is the development of pseudoaneurysm, which is the result of suture line dehiscence in the aortic annulus, the coronary ostia, and/or the distal aortic suture line. Aneurysms of the ascending aorta are rare entities that may occur after cardiac surgical procedures and have a significant rate of complications. Surgical repair of ascending aorta pseudoaneurysm remains a challenge to surgeons.

We report the case of a patient with an ascending aorta pseudoaneurysm that was successfully repaired surgically.

Case report

A 43-year-old man with a previous history of AVR and supra-coronary ascending aorta replacement with a tubular dacron graft operation 13 years previously was admitted with dyspnea and palpitation from 2 months before. On physical examination, there was a moderate degree systolic and diastolic murmur at the 2nd left intercostal space. Clinical examination of the cardiovascular system, serial electrocardiograms, and cardiac enzymes were normal. A chest x-ray showed an enlargement of the ascending aorta (Fig. 1).

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