

# The dramatic course of dissection of a giant thoracic aortic aneurysm

Dramatyczny przebieg gigantycznego rozwarstwionego tętniaka aorty piersiowej

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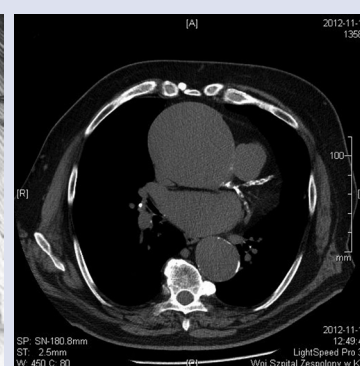
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A 64-year-old man with an aortic aneurysm, ischaemic heart disease, chronic heart failure III/IV according to NYHA class, permanent atrial fibrillation (AF), chronic kidney disease, diabetes mellitus type 2, and who had undergone an aneurysmectomy of an abdominal aortic aneurysm ten years earlier, was admitted to our Cardiology Centre because of congestive heart failure and a huge aortic aneurysm (Fig. 1) with an unknown date of dissection. Chest computed tomography showed expansion of ascending aorta to 105 × 81 mm and dissection of thoracic aorta, which started just above the aortic valve. The aortic arch was expanded to 95 mm and descending aorta to 41–35 mm. The actual canal of aorta was strictured to 5 mm, segmentally. Because of the very high risk, there was no possibility of making a coronarographic examination. The diagnosis was based only on incomplete, because of AF, reconstructions of an angio-tomography examination (Fig. 2). The patient was operated with cardiopulmonary bypass, hypothermia (25°C) and cardioplegic arrest with antegrade selective cerebral perfusion. The dissecting aneurysm, De Bakey I type, was confirmed intraoperatively. There was no possibility to use retrograde cardioplegy because of expansion of the aorta. The right chambers of the heart were compressed and dislocated. Two grafts were implanted. The first, an appropriately sized dacron graft, was selected and sewn to the ascending aorta just above the aortic valve. The second graft was sewn to the descending aorta. Also there was separate graft anastomosis to the brachiocephalic vessels using the 'insula technique'. Arch reconstruction was made with graft-to-graft anastomosis. Coronary bypass grafting to the marginal and left anterior ascending artery were made using the saphenous vein. Because of blood loss, cell-saver and blood transfusion were used intraoperatively. The perioperative period was complicated with intraoperative cardiac arrests which required defibrillations. Cardiopulmonary bypass was finally reinstituted and the patient in a serious condition was transferred to the Intensive Care Unit. The postoperative period was complicated with cardiogenic shock requiring the application of pressor amines and finished with sudden cardiac arrest. Immediate resuscitation was ineffective, and the patient died on the day of the operation. We think that the main reason for treatment failure was the very advanced disease and incomplete revascularisation because of the impossibility of assessing the coronary arteries. This case presents problems with a complete diagnosis of patients with such advanced disease with a severe condition and a lack of time before the urgent operation.



**Figure 1.** Computed tomography vs. intraoperative view of an ascending aortic aneurysm



**Figure 2.** Computed tomography: atherosclerotic plaques in the left main coronary artery

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