Dissecting aortic aneurysm in a 23 year-old hypertensive woman

Tętniak rozwarstwiający aorty u 23-letniej kobiety z nadciśnieniem tętniczym

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A 23 year-old woman was admitted to our hospital after loss of consciousness with chest pain in a stress situation (the woman’s wedding ceremony). The patient had been irregularly treated for mild hypertension from the age of eight. Secondary causes of hypertension were never diagnosed. There were no morphological features of Marfan syndrome in the patient. She had been operated upon for vesicoureteral reflux in childhood. The patient was admitted in a stable condition. Her physical examination revealed diastolic aortic murmur and tachycardia, blood pressure was normal. Transthoracic echocardiography showed expansion of ascending aorta to 43 mm and thoracic aorta dissection (Fig. 1). Chest computed tomography demonstrated thoracic aorta dissection, which began 15 mm above the aortic valve, expansion of ascending aorta to 44 mm, expansion of arch of aorta to 28 mm and pseudocanal of the descending aorta to 6.5 mm (Fig. 2). The dissection included brachiocephalic trunk, both common carotid arteries, left subclavian artery and abdominal aorta to the celiac trunk (Fig. 3). The patient was operated upon immediately. A dissecting aneurysm DeBakey I type was diagnosed intraoperatively. The Bentall de Bono procedure was done with implantation ComposiGraft St. Jude Medical 25. The early postoperative period was complicated by bleeding, requiring rethoracotomy and low output syndrome. Because of this, the patient was treated with pressor amines. In the following days, postoperative acute kidney failure occurred and patient was subjected to dialysis. Tamponade occurred and a puncture was performed with evacuation of liquid. The antihypertensive treatment was modified and vitamin K antagonist therapy was initiated. The patient was discharged from hospital on the 26th day of treatment.

Aortal dissection is one of the most life-threatening complications of hypertension. The commonest causes of aortal dissection are arterial wall abnormalities, which had not been demonstrated in histopathology in our patient. Long term, inadequately treated hypertension was the only aetiology factor of aortic dissection in this young woman.

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