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STUDIUM PRZYPADKU / *CLINICAL VIGNETTE*

Dissection mimicking coarctation or coarctation complicated by dissection — the same endovascular treatment?

Rozwarstwienie naśladujące koartację czy koartacja powikłana rozwarstwieniem — ten sam sposób postępowania?

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A 70-year-old man was admitted to the Department of Cardiology via the Emergency Department for worsening of cardio-respiratory insufficiency. On admission, his New York Heart Association class was assessed as III. Physical examination revealed atrial fibrillation with a ventricular rate of approximately 72/min and elevated blood pressure (BP) of 175/105 mm Hg. Coronary angiography showed no significant changes in the coronary arteries, and aortography revealed aortic stenosis at the level of the isthmus (transverse dimension 21 mm). Computed tomography (CT) angiography detected a 50-mm dissection of the descending aorta beginning approximately 28 mm below the origin of the left subclavian artery and ending before aortic angulation at the isthmus. The lumen was narrowed to 22 mm (Fig. 1A, B). Magnetic resonance angiography confirmed the presence of aortic dissection approaching the aortic stenosis (Fig. 1C). Before admission to the Department of Cardiology the patient had not been investigated for suspected coarctation of the aorta. There was no history of peripheral artery disease and no features of ischaemia of the lower extremities and abdominal organs on physical examination and imaging tests. The patient was qualified for surgery in the Department of General, Vascular, and Transplantation Surgery. Because of comorbidities minimally invasive procedure, i.e. intravascular stent graft implantation into the descending aorta through the right femoral artery access, was planned and carried out under general anaesthesia. After surgical exposure of the common femoral artery, aortography was performed to determine the precise location of the aortic dissection and stenosis. Next, a 192-mm stent graft ZenithTX2® Thoracic Endograft (Cook Medical) 28–34 mm was inserted and extended just below the origin of the left subclavian artery. Intraoperative aortography confirmed normal expansion of the stent graft and showed no leakage. The arteriotomy was closed with a Prolen 5/0 vascular suture. The wound was sutured in layers and a Redon drainage system was left in place for 1 day. The early postoperative period was uneventful. CT examination performed at 6 days post surgery confirmed the correct attachment of the graft below the origin of the left subclavian artery. The largest transverse dimension of the thoracic aorta was 44 mm and the smallest, at the level of the isthmus, was 35 mm. A follow-up CT examination at 12 months post surgery also showed the correct attachment of the graft below the origin of the left subclavian artery with no leaks (Fig. 1D). Systemic BP remained normal through long-term follow up.

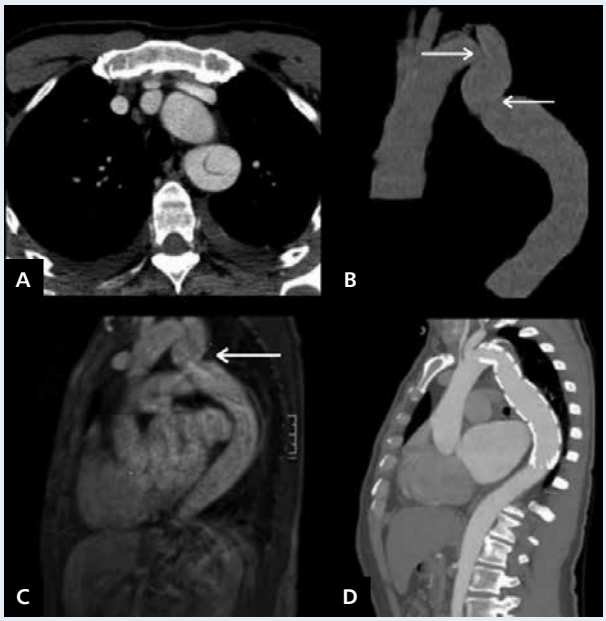

Figure 1. **A**, **B**. Computed tomography angiography (CTA): a narrow true lumen surrounded by a false lumen, with the critical stenosis at the level of the aortic isthmus (arrows); **C**. Critical stenosis (arrow); of thoracic aorta confirmed by nuclear magnetic resonance; **D**. 12-month follow-up; CTA — complete sealing of the dissection with a slight residual stenosis of the thoracic aorta

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