IMAGES IN SURGERY

TWO-STAGED TREATMENT OF SYMPTOMATIC COMPLEX TYPE 2 Thoracoabdominal aneurysm with unconventional evar, tevar, and ibevar

Henrique Guedes da Rocha¹, Paulo Almeida¹, Carolina Vaz¹, Rui Machado¹

¹ Department of Angiology and Vascular Surgery, Centro Hospitalar Universitário de Santo António, Unidade Local de Saúde de Santo António, Porto, Portugal

A 75-year-old male patient is admitted hemodynamically stable with persistent back and lower left abdominal pain. CT-angiography revealed a type 2 thoracoabdominal aneurysm and a 42 mm left common iliac aneurysm with signs of imminent rupture (Figure 1A).

Due to material constraints and the need for future F/BEVAR, we prioritized the symptomatic infra-renal aorta and iliac aneurysms. A 36 mm bifurcated EVAR (Endurant IIs, Medtronic) was deployed with unconventional proximal fixation (Figure 1B, dashed lines) approximately 50 mm below the renal arteries (Figure 1B, straight lines). Using a plug (Amplatzer AVP II, Abbott), we occluded the left hypogastric artery (Figure 1B, arrow). The left limb was extended to the external iliac artery, and

the right was extended to the common iliac artery. The patient's symptoms resolved, and two weeks later, we treated the thoracoabdominal aneurysm with a thoracic endograft (Valiant Captiva, Medtronic) with proximal sealing in Ishimaru zone 3 and an off-the-shelf iBEVAR (E-inside, Jotec). The procedure successfully preserved all four aortic visceral vessels except the celiac trunk, whose branch was occluded with a plug (Figure 2). No additional endograft was required to connect these two endografts as adequate oversizing and overlap were achieved. Prophylactic cerebrospinal fluid drainage was used during the second procedure. No neurological events were registered. The patient was discharged after an 18-day hospital stay with no complications.



