

Severe Focal Stenosis of the Abdominal Aorta with High Risk of Occlusion

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We present the case of a 58-year-old male patient, chronic smoker, with a history of hypertension and diabetes, referred to the Vascular Surgery Unit for claudication below 100 m (Rutherford III class) and paresthesia in the lower limbs. Physical examination revealed diminished bilateral femoral pulses.

A computed tomography angiography scan revealed severe isolated stenosis (over 70%) of the abdominal aorta (arrows in Panel A, B, and C), below the emergence of the inferior mesenteric artery, due to a soft plaque, with high thrombogenic risk.

A successful endovascular intervention was performed, via a transfemoral approach, with placement of a 14-mm stent graft in the abdominal aorta, achieving flow restoration, without any intraprocedural events. The postoperative evolution did not record any complications, and the patient was discharged on the third day, symptom-free.

The bifurcation of the aorta is a common vascular site for atherosclerotic lesions, with severe stenosis or occlusion of the abdominal aorta. Standard therapy for these lesions is surgical repair, with endarterectomy for focal aortic disease, or bypass graft placement in case of widespread aortoiliac atherosclerotic disease. The long-term outcomes of surgery are well established in the literature, with graft patency rates of 90% at five years and 75% at 10 years, with an early significant complication risk of 5–10%.¹

However, because the frequency of focal distal aortic stenosis without involvement of the aortic bifurcation is relatively rare, these lesions are typically documented in the literature in conjunction with stenosis affecting the aortoiliac junction.² Percutaneous transluminal angioplasty (PTA) is used to treat abdominal localized stenosis,³ with positive short- and long-term outcomes. PTA is a less invasive alternative to surgery, with less side effects.⁴

CONFLICT OF INTEREST

Nothing to declare.

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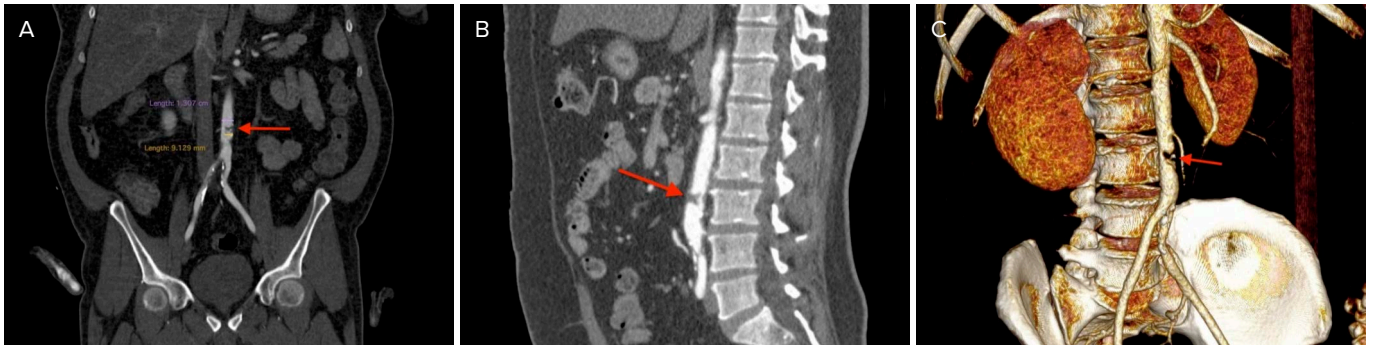


FIGURE 1. **A** – CT angiography coronal section, showing severe stenosis of the abdominal aorta; **B** – sagittal section showing the stenosis; **C** – 3D reconstruction showing severe isolated stenosis and subsequent repermeabilization without distal stenosis

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