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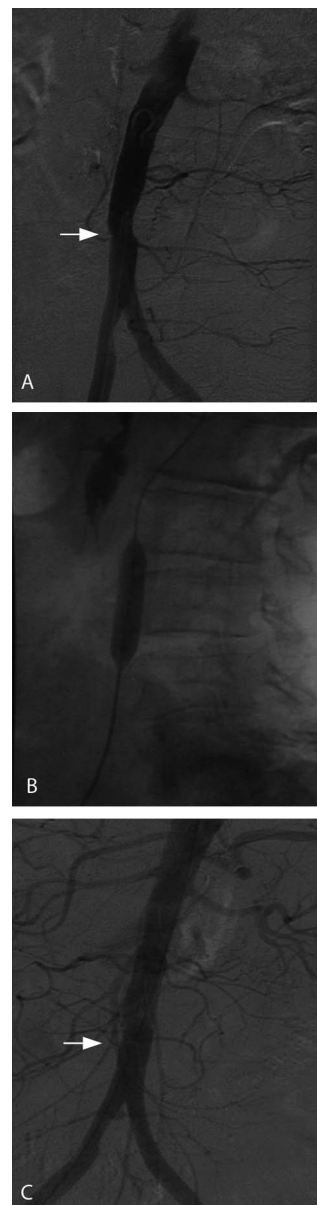
## Endovascular treatment of a symptomatic isolated infrarenal aortic stenosis

Radu Rogoveanu,<sup>1</sup> Simon Rajendran,<sup>2</sup> Michael Lee,<sup>3</sup> Daragh Moneley<sup>1</sup><sup>1</sup>Department of Vascular Surgery, Beaumont Hospital, Dublin, Ireland<sup>2</sup>Department of Vascular Surgery, Royal College of Surgeons in Ireland, Dublin, Ireland<sup>3</sup>Department of Radiology, Beaumont Hospital, Dublin, IrelandCorrespondence to Dr Simon Rajendran, [simonrajendran@gmail.com](mailto:simonrajendran@gmail.com)**DESCRIPTION**

A 72-year-old woman presented with a 10-month history of progressively worsening lower-back pain radiating to both lower limbs. The pain was aggravated by movement severely restricting daily activities. Symptoms were attributed to neurogenic claudication due to spinal stenosis. Pain was managed with analgesia and epidural injections. Worsening symptoms prompted further investigations. Magnetic resonance angiography demonstrated a focal infrarenal aortic stenosis with no evidence of iliac disease or external compression (figure 1). Angioplasty was performed using a 10fr balloon improving vessel calibre (figure 2). Postoperative recovery was uneventful with dramatic improvement in lower-limb symptoms allowing mobilisation with reduced analgesia.



**Figure 1** MRA demonstrating focal stenosis on the terminal aorta.



**Figure 2** (A) Angiogram showing focal narrowing in the infrarenal aorta (arrow). (B) A 10fr balloon was inserted and angioplasty was performed. (C) Angiogram demonstrating improved calibre following angioplasty.

Isolated infra-renal aortic stenosis is rare and typically presents with claudication symptoms. Presentation with back pain radiating down the legs is unusual. Differential diagnosis includes neurogenic claudication caused by spinal stenosis. Focal aortic lesions are treated by surgical endarterectomy or bypass graft placement. Balloon dilatation or stenting, increasingly being used,<sup>1</sup> are suitable alternatives to surgery.<sup>1 2</sup> Currently, percutaneous transluminal angioplasty has become an important treatment strategy in lesions with little or no iliac disease because it is less invasive, offers good symptomatic relief and is suitable for patients unfit for open surgery.<sup>3</sup> Failure occurs because of elastic recoil, obstructive intimal dissection or late restenosis, which may require further endovascular intervention or surgery. Furthermore, there is a significant risk of distal thromboembolism. This case highlights the importance of thorough re-evaluation of patients with progressive symptoms and the application of endovascular treatment in selected cases.

## Learning points

- ▶ Thorough clinical assessment is important in patients with progressive disease.
- ▶ The lack of predisposing risk factors does not exclude disease.
- ▶ Therapeutic attitude is dictated by extent of disease, symptoms and patient factors.

**Competing interests** None.

**Patient consent** Obtained.

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