

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

---

### Vascular Diseases Quiz – Case 55

A 62-year-old patient presented with intermittent claudication of the buttocks and calves that was demonstrated after walking a short distance. She had a medical history of hypertension and smoking. Pulse was absent at the level of the common femoral arteries on both sides. Computed tomography angiography (CTA) was performed, which demonstrated the above findings (fig. 1).

What pathology was shown in CTA and what should be the treatment plan?

The CTA demonstrated a high-grade stenosis of the infrarenal segment of the abdominal aorta. Due to the focal infrarenal stenosis the endovascular approach was preferred, and a balloon expandable covered stent was deployed at the level of the pathology.

Compared to open repair, the endovascular treatment of infra-renal aortic stenosis shortens the hospital stay and provides an effective long-term result without the significant comorbidity

and complications related to open surgery. In some cases where a re-intervention is necessary, a new endovascular procedure is easy to be performed. The balloon expandable covered stent demonstrates the advantage of increased radial force and low embolism, restenosis and abdominal aortic perforation rates (fig. 2).

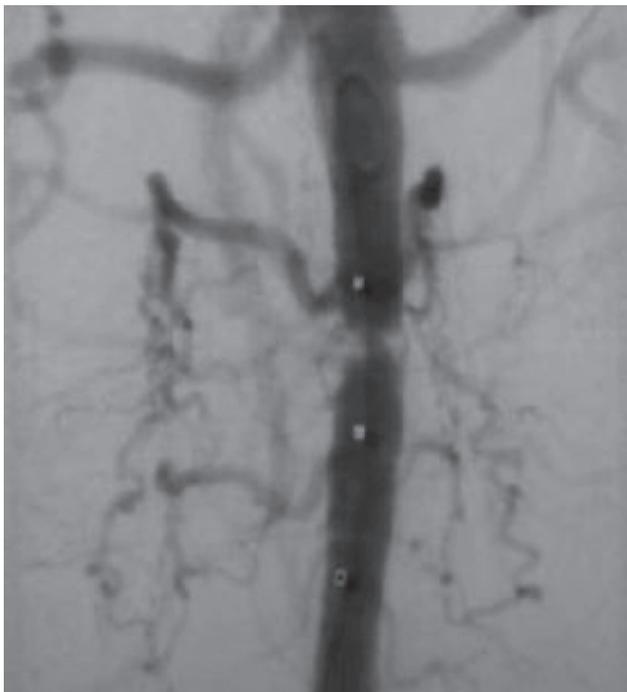
ARCHIVES OF HELLENIC MEDICINE 2020, 37(2):279–280  
ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2020, 37(2):279–280

---

**K. Kakavia,<sup>1</sup>**  
**T. Bisdas,<sup>2</sup>**  
**N. Patelis<sup>2</sup>**

---

*<sup>1</sup>First Department of Surgery, Vascular Unit, "Laiko" General Hospital, Medical School, National and Kapodistrian University of Athens, Athens, Greece*  
*<sup>2</sup>Department of Vascular Surgery, Athens Heart Center, Athens Medical Center, Athens, Greece*



**Figure 1.** Computed tomography angiography (CTA) of the abdominal aorta and common iliac arteries.



**Figure 2.** The infrarenal aorta after the deployment of the stent-graft.

## References

1. SIMONS PCG, NAWIJN AA, BRUIJNINCKX CMA, KNIPPENBERG B, DE VRIES EH, VAN OVERHAGEN H. Long-term results of primary stent placement to treat infrarenal aortic stenosis. *Eur J Vasc Endovasc Surg* 2006, 32:627–633
2. GRIMME FAB, REIJNEN MMPJ, PFISTER K, MARTENS JM, KASPRZAK P. Polytetrafluoroethylene covered stent placement for focal occlusive disease of the infrarenal aorta. *Eur J Vasc Endovasc Surg* 2014, 48:545–550
3. WHITBECK MG. Treatment of focal distal abdominal aortic stenosis with the GORE VIABAHN VBX balloon expandable covered stent. *Catheter Cardiovasc Interv* 2019 [online ahead of print]
4. BELYAVSKAYA T, KALMAR P, KONSTANTINIUK P, BAUMANN A, COHNERT T. Aortic stenting in symptomatic infrarenal aortic stenosis and subtotal aortic occlusion. *Vasc Endovascular Surg* 2019, 53:303–309

*Corresponding author:*

N. Patelis, Department of Vascular Surgery, Athens Heart Center, Athens Medical Center, 151 25 Marousi, Athens, Greece  
e-mail: patelisl@gmail.com