



Patient history



Procedure description



Final results



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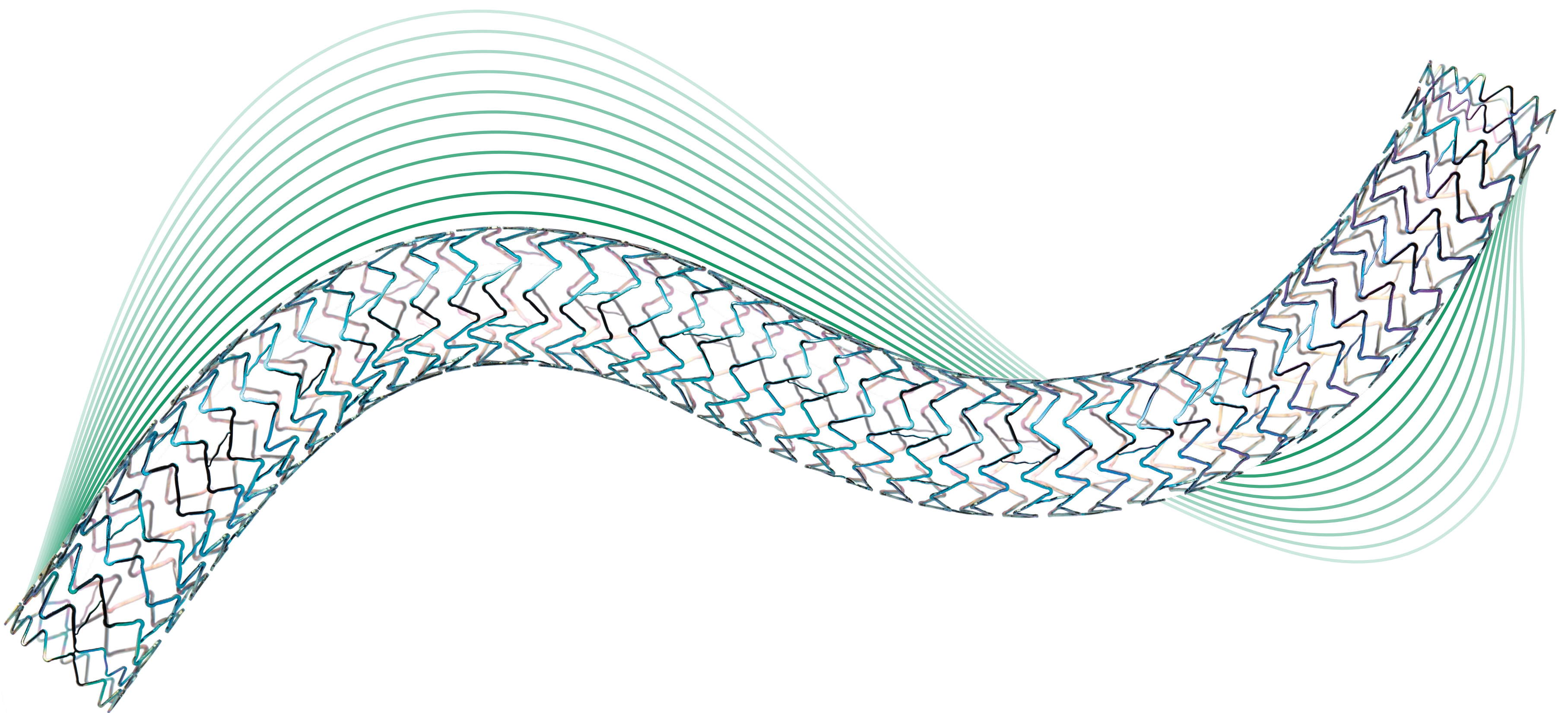
Vascular Intervention // **Peripheral**
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Case Report

Transradial Stenting for High-Grade Common Iliac Artery Stenosis



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1. Patient history

A young 42-year-old patient was admitted to the cardiology department with claudication (Fontaine class IIb) after consultation with a vascular surgeon in different institution who advised getting another opinion from an interventional cardiologist. He complained of right leg pain on 200 m walking distance for 2 weeks. Cardiovascular risk factors including heavy smoking, non-insulin-dependent diabetes mellitus and dyslipidemia. On duplex ultrasound, a high-grade stenosis of the right common iliac artery and obstructive signal on the left common iliac artery were present. There were no wounds or trophic changes on either extremity.

2. Procedure description

A transradial approach (TRA) was decided for the right leg intervention. The left asymptomatic leg did not undergo intervention due to the high-grade ipsilateral collateral vessels providing sufficient flow. Angiography showed a normal right radial artery (Figure 1), and coronary angiography showed no significant lesions in the coronary arteries. The distal aorta was engaged with a 6F diagnostic pigtail catheter to perform aortography with visualization of the arteries of the legs. There was a chronic total occlusion of the left common iliac artery from the ostium to the proximal superficial femoral artery; however, sufficient collaterals were present.

The right distal common iliac artery was 95% stenosed (Figure 2). A 6F, 110 cm Flexor Shuttle Guiding Sheath (Cook Medical) was introduced from the right radial artery, and the lesion was crossed with a 260 cm, 0.035" GlideWire (Terumo). We performed balloon angioplasty with a 7 x 40 mm **Passeo[®]-35** angioplasty balloon (BIOTRONIK) inflated to 8 atm (Figure 3). Finally, a 9 x 38 mm **Dynetic[®]-35** balloon-expandable cobalt chromium stent system (BIOTRONIK) was implanted (dilated to 9 atm), with a usable catheter length of 170 cm, due to the distance from the right radial artery. The stent easily passed the lesion due to its low crossing profile and stent design, which offers excellent deliverability (Figure 4).

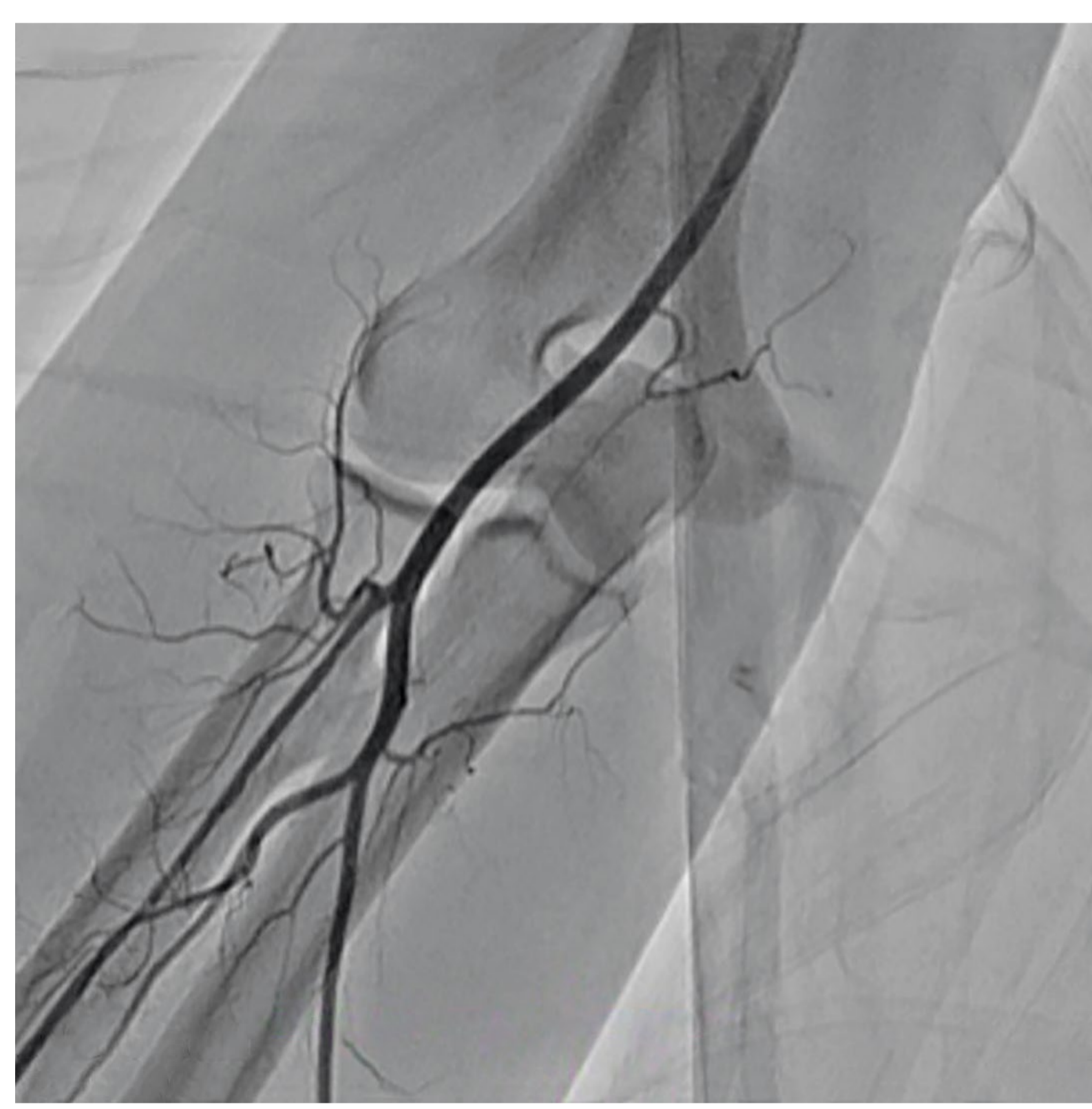


Fig. 1



Fig. 2

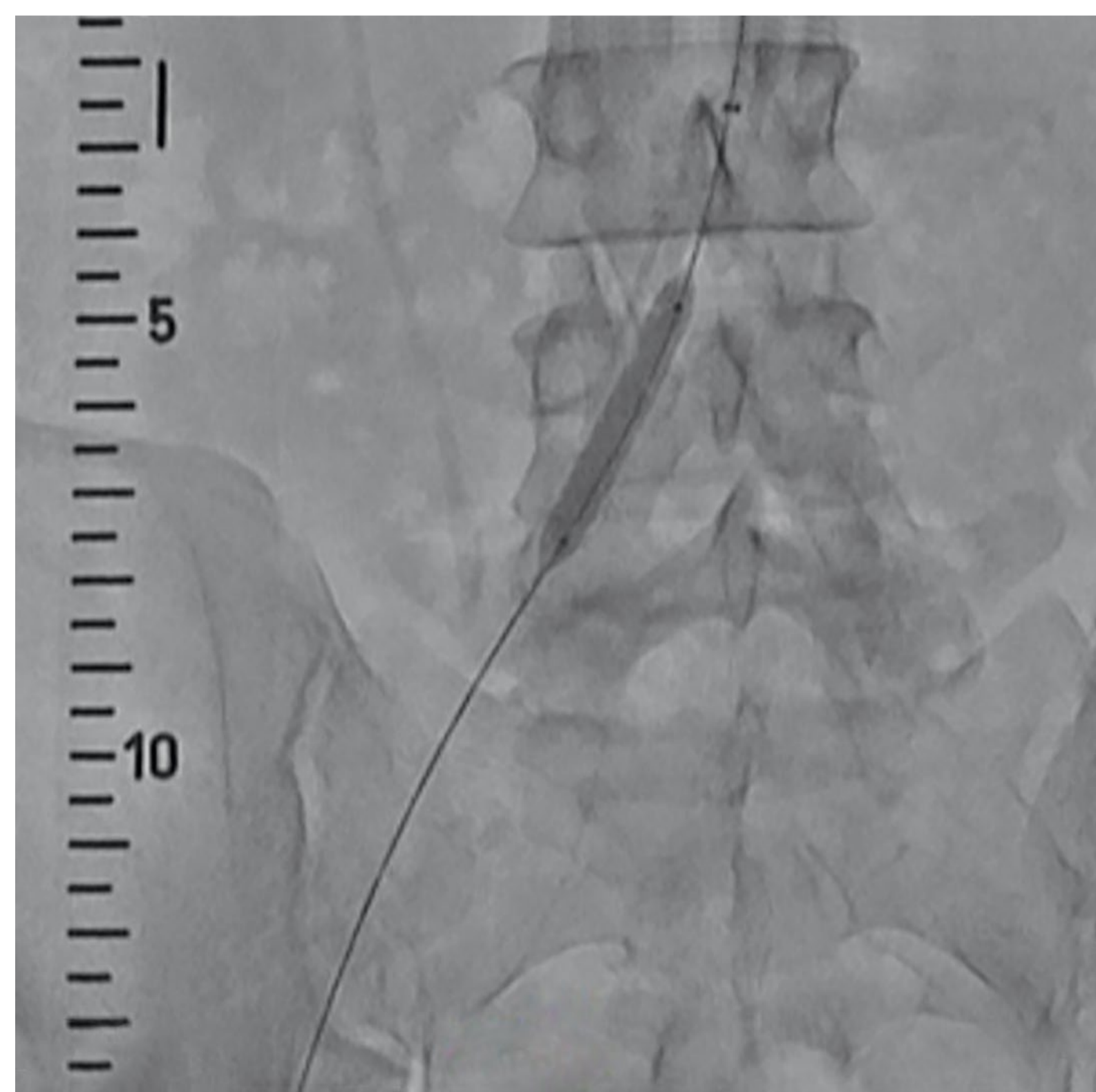


Fig. 3

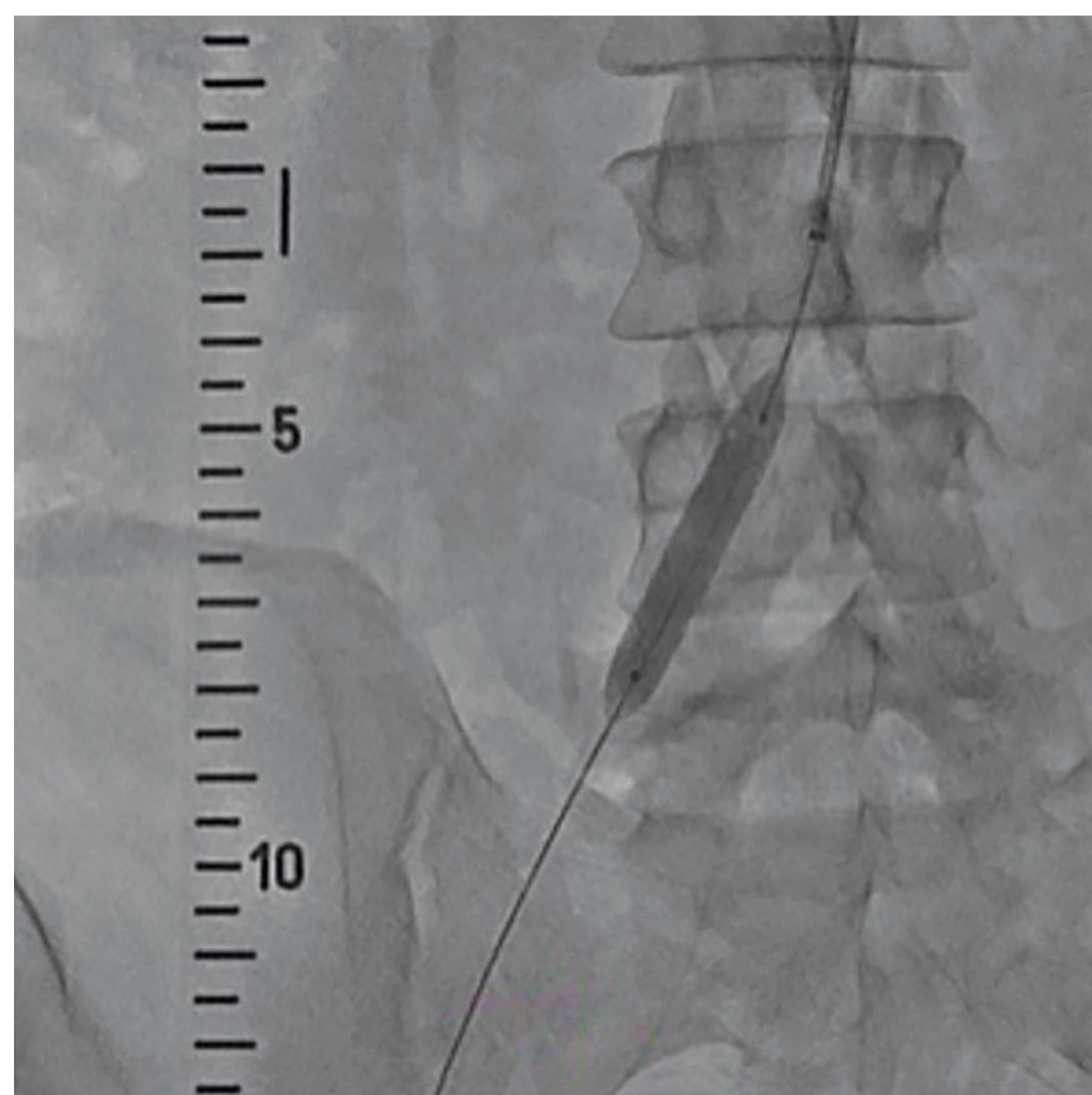


Fig. 4

3. Final results and conclusion

An excellent angiographic result was achieved. Selective angiography showed full patency of the artery without residual stenosis and no compromise of the internal iliac artery (Figure 5). The patient was loaded with 300 mg clopidogrel and 100 mg acetyl-salicylic acid. Follow-up examination after 4 hours on duplex sonography showed normal pulse wave velocity of the right leg. The patient was discharged from the hospital without symptoms 6 hours after intervention thanks to the TRA approach. At 1-week follow-up, the patient reported that he had a pain-free walking distance of more than 3,000 meters at approximately 4 km/h.

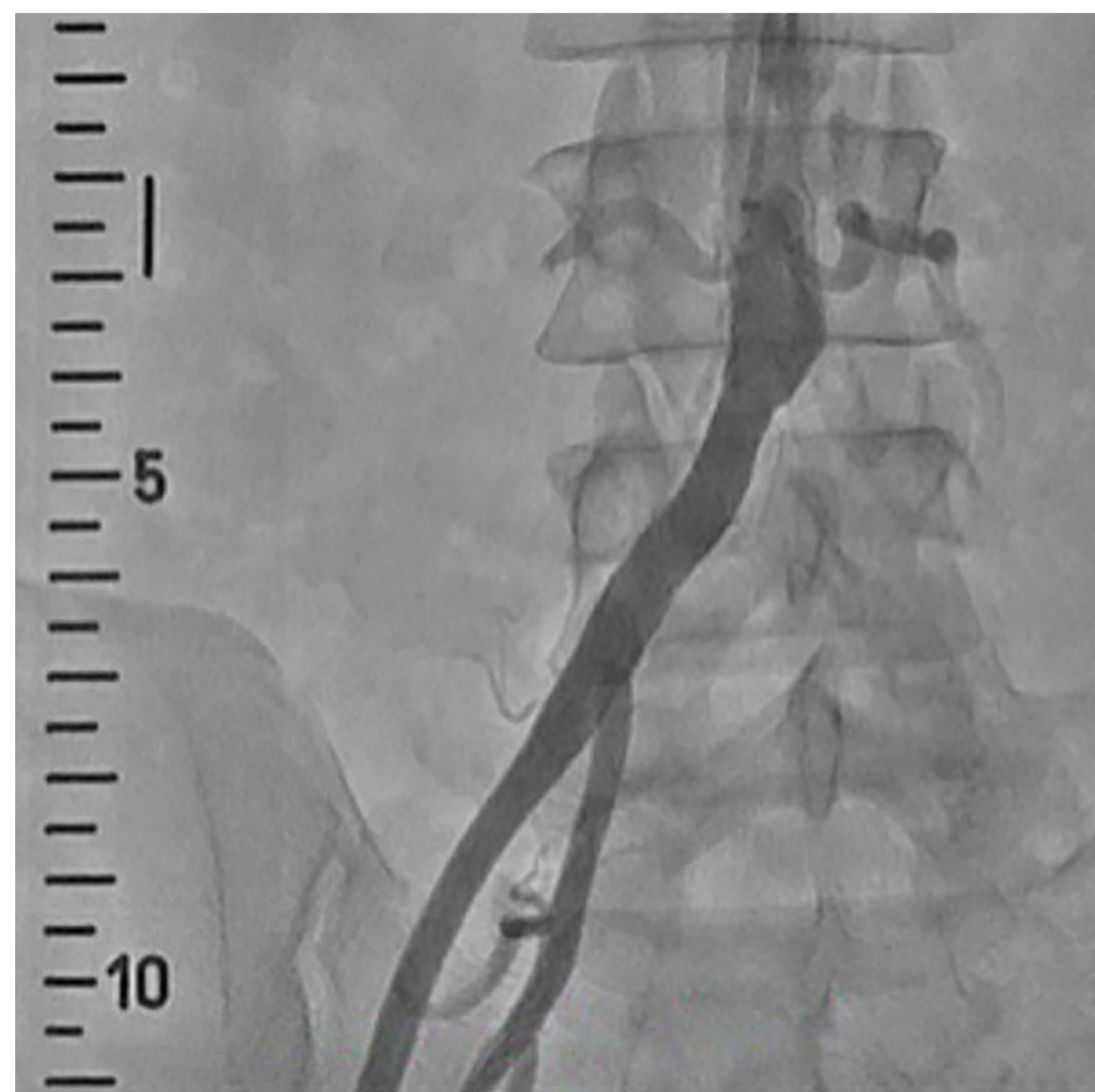


Fig. 5

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