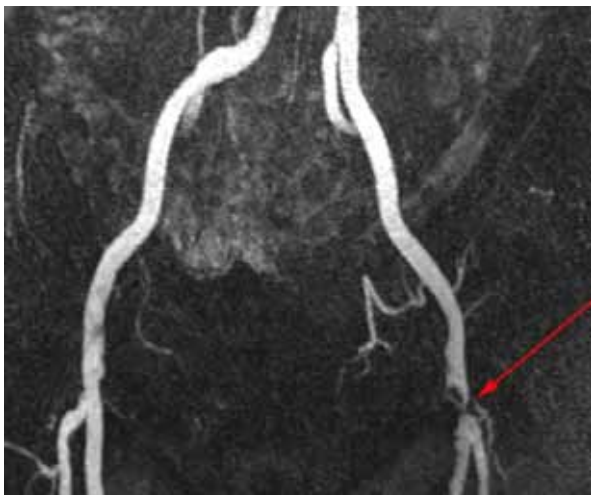


Case Report

Successful intraoperative detection of flap in femoral thrombendarterectomy using VeriQ C for intraoperative ultrasound

Case presentation by
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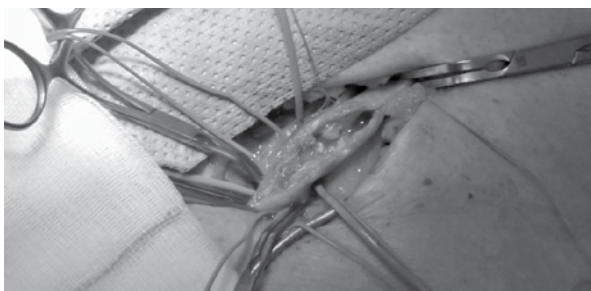


Patient

A male patient, 71 years old, suffered from intermittent claudication. After walking 50–100 meters, he described pain in his left calf. As secondary diagnoses, a history of hypertension and hyperlipidemia was elicited. Under examination, all pulses on the right side were palpable. On the left, the pulse in the groin was weak, other pulses were not detectable. The ABI was reduced to 0.5.

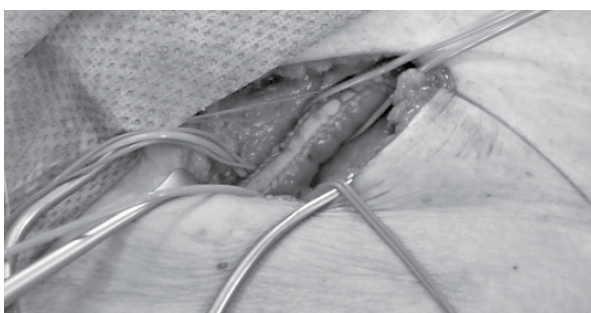
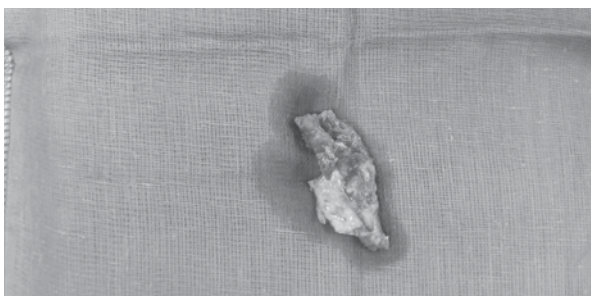
Pre-operational findings

Both MRI and ultrasound indicated a high-grade stenosis of the left common femoral artery, while the other vessels were patent.

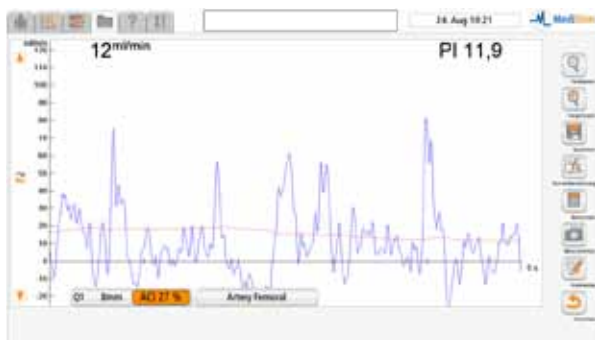


Operational procedures

We decided to perform a local desobliteration, as interventional procedures in this area harbor the risk of dissection. After normal preoperative assessment (ASA II) the patient was operated on under general anesthesia. Via a longitudinal incision, the femoral arteries were exposed. 5000 iE of heparin were given, the clamps were placed, and the artery was opened longitudinally. Local thrombendarterectomy of the common, superficial and deep femoral arteries was performed.

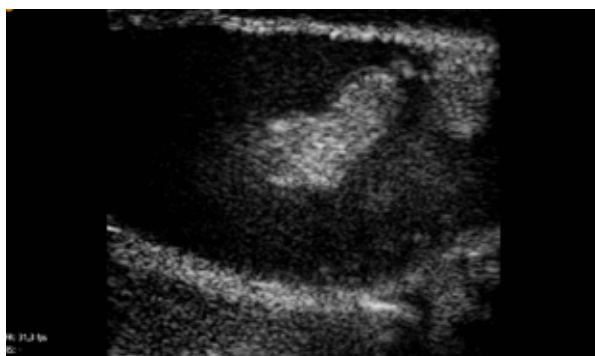


Closure was achieved using a bovine patch plasty (Vascugard[®], suture 6x0 polypropylene). Before closure, inflow and backflow were tested. There was a good pulse palpable on all femoral vessels.

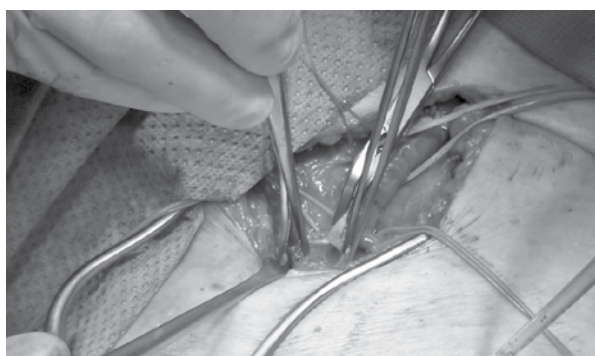


Quality assessment using VeriQ C™ scanning

Following vessel closure, Transit Time Flow Measurement (TTFM) using the VeriQ C served as first quality control. The results indicated poor flow and high PI in the superficial femoral artery (SFA).



Then ultrasound scanning with the intraoperative probe of the VeriQ C System was performed to detect the cause of the poor flow. The scan revealed a flap with partial occlusion of the reconstruction, despite the good pulse in the SFA.



Re-assessment

After revision, TTFM and ultrasound scanning with VeriQ C indicated good flow and PI was reduced significantly. A drainage was placed, and the wound was closed normally (2 layers). The patient received heparin (low molecular) for 7 days and acetyl salicylic acid for life. Additionally, we administered a statin.

The course after the operation was uneventful. The peripheral pulses were distally palpable. ABI improved to 1.2 on the left on both arteries. The patient was dismissed on the 7th postoperative day.

Equipment

VeriQ C™ from Medistim, using an 8 mm perivascular TTFM probe.



For further information on the case, contact

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For further information about scanning or TTFM measurements using VeriQ C, visit www.medistim.com.

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