High-Resolution Angioscopy of Endoluminal Stent Graft at 6 Months After Implantation

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A 75-year-old man with long occlusion of the right superficial femoral artery (SFA) had undergone 2 Viabahn® (WL Gore & Associates, AZ, USA) 5.5–150-mm and 6.0–100-mm implantations 6 months previously (**Figure A,B**). As anti-thrombotic treatment, clopidogrel 75 mg/day and aspirin 100 mg/day were given for 1 month, and then clopidogrel was discontinued. Follow-up angiogram demonstrated no restenosis at the implant site (**Figure C**). Angioscopy (Zemporshe®, OVALIS, Osaka, Japan) showed several thin linear longitudinal thrombi and the naked graft on the inside of the Viabahn (**Figure D,E**). At the distal edge of the Viabahn, we observed a step between the stent graft and native SFA (**Figure F**). Neointimal proliferation or plaque growth were not observed.

Stent graft thrombosis is the disadvantage of covered stents. Edge restenosis is a known factor for Viabahn stent graft thrombosis.¹ In the present case, the edge of the stent was smooth and did not show restenosis.

The Zemporshe high-resolution angioscope is equipped with a 0.48-megapixel equivalent resolution camera. In this case, Zemporshe could clearly visualize the histopathology inside the Viabahn implanted to the SFA.

Disclosures

The authors declare no conflicts of interest.

Reference

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Figure. (A) Baseline angiography showing long total occlusion in the right superficial femoral artery. (B) Lines, Viabahn implantation sites. (C) Six-month follow-up angiography showing good expansion. (D) Angioscopy showing the naked graft and (E) several longitudinal thrombi. (F) At the distal edge of the Viabahn, a step was observed.