High-Resolution Angioscopic Observation of Deep Vein Thrombosis After Catheter-Directed Venous Thrombolysis

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Venous angioscopy has not been reported. Here we describe successfully observing veins by high-resolution angioscopy (Zemporshe; Taisho Biomed Instruments, Osaka, Japan) in the week after catheter-directed thrombolytic treatment (CDT).

A 67-year-old woman presented with right leg swelling. Contrast-enhanced computed tomography showed an occlusion of the right iliofemoropopliteal vein by thrombus. She was treated with CDT, followed by anticoagulation and thrombolytic therapy. Venography and angioscopy (**Figure**) at 1 week after CDT showed a fibrous strand of thrombus in the femoropopliteal vein and absence of thrombi in the iliofemoral vein.

Obstruction of a vein by a thrombus damages the vessel wall by the inflammatory process.¹ The longer the thrombus is in contact with the wall, the greater the damage,² leading to post-thrombotic syndrome (PTS). Early elimination of the thrombus may preserve valvular function and prevent fibrosis, a sequela of chronic thrombus.³ As in this case, high-resolution angioscopy after venous thromboembolism could predict the occurrence of PTS.

Disclosure

The authors declare that there are no conflicts of interest.

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Figure. (Left) Venography showing stenosis of the right femoral vein. (A,B) Angioscopy showing the fibrous strand. (C,D) Angioscopy showing no thrombus.

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