

CHRONIC TOTAL OCCLUSIONS



PHYSICIAN
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ACCESS SITES

- A 6-F sheath is placed via the Seldinger technique in the contralateral femoral artery. A 5-F, 55-cm contralateral hook catheter is placed in the ipsilateral common iliac, and a .035-inch, angled hydrophilic guidewire is used to cross into the distal external iliac, ipsilateral common femoral and, ultimately, into the ipsilateral profunda femoris by the roadmapping technique. This is then exchanged over a Glide catheter for a stiffer .035-inch wire, which allows the bifurcation to be splayed open, allowing a contralateral access sheath to be placed.

DIAGNOSTIC DEVICES USED

SHEATH SIZES

6-F, 45-cm contralateral.

FLUSH DIAGNOSTIC CATHETERS

5-F pigtail.

SELECTIVE DIAGNOSTIC CATHETERS

4-F Glide catheter or .035-inch-compatible support catheter.

DIAGNOSTIC GUIDEWIRES

Stiff, angled .035-inch, 260-cm hydrophilic.

DIAGNOSTIC NOTES

Catheter and guidewire placement is best performed and confirmed using a roadmapping technique.

INTERVENTIONAL DEVICES USED

INTERVENTIONAL GUIDEWIRES

Same as are used for diagnostic components.

INTERVENTIONAL SHEATHS OR GUIDE CATHETERS

4-F, 100-cm to 135-cm, low-profile, exchange-length.

PTA BALLOONS

5 mm to 6 mm in diameter, usually 10 cm long.

STENTS

6 mm to 7 mm in diameter, length correlates to lesion.

OTHER EQUIPMENT USED

A 2-mm to 2.5-mm laser catheter allows vaporizing the plaque through the entire SFA, which often identifies where the true lesions are without doing long segments of balloon dilatation. If the vessel opens up with only short segments of disease at the adductor canal and at the proximal cap, then those segments are stented.

IMAGING

Angiography, roadmapping.

CONTRAST RECOMMENDATIONS

Standard contrast.

INTERVENTIONAL NOTES

If the .035-inch angled hydrophilic guidewire does not cross into the distal vessel, I exchange the 6-F contralateral sheath for a 7-F sheath, through which I would advance a CrossPoint catheter to allow IVUS-guided re-entry. The other alternative would be to use a Frontrunner device, which would allow re-entry without IVUS guidance. Once re-entered, I use a similar technique of laser, balloon, and ultimately stenting. It is important to avoid re-entering the vessel much farther down than the reconstitution on the initial angiogram, thereby decreasing the likelihood of extending the dissection plane. Although not often needed, covered stents should be available.

PHARMACEUTICALS

Heparin.

TESTS USED

ACT of approximately 200 seconds. ■