

# DEEP VEIN THROMBOSIS



**PHYSICIAN**  
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## ACCESS SITES

- Popliteal or lower; occasionally posterior tibial.

## DIAGNOSTIC DEVICES USED

### SHEATH SIZES

5 F to 8 F depending which method of lysis is chosen (catheter-directed lysis: 5 F; AngioJet: 6 F; Trellis: 8 F).

### DIAGNOSTIC CATHETERS

Any catheter will work, but I prefer an angled hydrophilic wire.

### DIAGNOSTIC GUIDEWIRES

Usually Bentson or a hydrophilic wire.

### DIAGNOSTIC NOTES

The interventionist should optimally do a pullback venogram to determine the extent of the clot, unless he/she is unable to negotiate through chronically occluded central veins. After this is complete, start lysis and try to cross the occlusion after the acute clot is dissolved. A second access via a jugular or femoral approach may become necessary after the acute clot is dealt with and the interventionist is trying to treat a chronic iliac or caval occlusion.

## INTERVENTIONAL DEVICES USED

### INTERVENTIONAL GUIDEWIRES, SHEATHS, AND GUIDE CATHETERS

Same as described above for diagnostic use.

### PTA BALLOONS AND STENTS

Balloons and stents between 8 mm and 16 mm for iliac DVT; high-pressure balloons may become necessary, and I prefer nitinol self-expanding stents.

### THROMBECTOMY DEVICES

AngioJet or Trellis.

### PHARMACEUTICALS

The use of full-dose heparin during the procedure depends on the patients' risk of bleeding. Some routinely use subtherapeutic heparin during thrombolysis. I recommend systemic anticoagulation if mechanical thrombectomy/lysis is performed and for the majority of patients during pharmacologic lysis.

### TESTS USED

Patients need to be anticoagulated after the procedure similar to any patient with DVT (usually a minimum of 6 months). Patients are also worked up for hypercoagulable conditions and treated appropriately. Clinical and imaging (usually ultrasound) follow-up is done at 3, 6, and 12 months.

### TIPS AND TRICKS

The approach to the patient will vary depending on which one of several scenarios is encountered. In general, chronic occlusions of central veins (cava, iliacs, common femoral down to saphenofemoral junction) can be stented. Balloon angioplasty alone is rarely effective. Stents in more peripheral veins have not been shown to have a reasonable patency. ■