

Subject: Use of 3 French AngiOptic Angiographic Catheters

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The following data was provided by Dr. James Caridi, University of Florida, Shands Teaching Hospital.

Clinical Advantages:

Experience has shown that the 3 French AngiOptic catheter provides very good torque and "pushability." The AngiOptic catheter, being totally radiopaque, provides excellent visibility under fluoroscopy for ease of catheter placement. This smaller diameter catheter reduces the risks of hematoma and the time needed to achieve hemostasis of the accessed vessel. The 3 French AngiOptic catheter is preferred for patients who require angiography but are on heparin or with a low platelet count. The maneuverability and visibility of the 3 French AngiOptic catheter provides a significant advantage for pediatric studies.

Patient Advantages:

The use of the 3 French AngiOptic catheters results in a shorter recovery time for the patient. Most patients can ambulate after only two hours. The total time for hospital stay is reduced resulting in lower cost to the patient and the hospital. The 3 French catheters also offer advantages for a brachial approach.

Access Technique:

Use the standard Seldinger technique. Use the following needle and wire sizing chart as a guide.

NEEDLE SIZE	NEEDLE O/D DIAMETER	3F OUTER	GUIDEWIRE COMPATIBLE	COMMENTS
21 g	.032 In.	.040 In.	.018 In.	21 gauge performs well for standard entry procedures
20 g	.035 In.	.040 In.	.018 In.	20 gauge needle may be needed where more support is necessary such as in scarred vessels.
19 g	.042 In.	.040 In.	.025 In.	19 gauge needles may be needed where the additional support of a .025 In. wire is necessary. Note: In these patients leakage may occur around the catheter.

Note:

Dr. Caridi uses a 21 gauge needle and a .018 In. nitinol guidewire, but states that any .018 guidewire may be used to reduce the cost of the procedure. Due to the small outer diameter (0.040 In.) of the 3 French AngiOptic catheter, vessel entry is an easy, smooth access. Use a dilator in scarred grafts if necessary. Because of decreased friction associated with smaller size catheters, it appears that the 3 French catheter yields an easier access for those patients with very diseased vessels as opposed to the larger catheter sizes.

Technical Parameters for using 3 French AngiOptic Catheters:

Using Visapaque 320 for a routine aortogram, 7 cc/sec., Total Volume = 21 cc

Using CO² for a routine aortogram, 50-75 cc/sec., Total Volume = 40-60 cc

Summary:

The 3 French AngiOptic catheter promotes easy use with excellent visibility providing decreased potential complications and cost to the patient.