By: Sheila Collins, RN, RT

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

CLINICAL ADVANTAGES
Experience has shown that the 3F 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 3F AngiOptic catheter is preferred for patients who require angiography but are on heparin or with a low platelet count.

PATIENT ADVANTAGES
The use of the 3F 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 3F catheters also offer advantages for a brachial approach.

TECHNICAL PARAMETERS FOR USING 3F ANGIOPTIC CATHETERS
*Using Visapaque 320 for a routine aortogram, 7 cc/sec., Total Volume = 21 cc

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

<table>
<thead>
<tr>
<th>Needle Size</th>
<th>Needle O/D</th>
<th>3F Outer Diameter</th>
<th>Compatible Guidewire</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 G</td>
<td>.032*</td>
<td>.040&quot;</td>
<td>.018&quot;</td>
<td>21 gauge performs well for standard entry procedure</td>
</tr>
<tr>
<td>20 G</td>
<td>.035*</td>
<td>.040&quot;</td>
<td>.018&quot;</td>
<td>20 gauge needle may be needed where more support is necessary such as in scarred vessels.</td>
</tr>
<tr>
<td>19 G</td>
<td>.042*</td>
<td>.040&quot;</td>
<td>.025&quot;</td>
<td>19 gauge needles may be needed where the additional support of an .025&quot; wire is necessary. Note: In these patients leakage may occur around the catheter.</td>
</tr>
</tbody>
</table>

NOTE: Dr. Caridi uses a 21 gauge needle and an .018" nitinol guidewire, but states that any .018" guidewire may be used to reduce the cost of the procedure. Due to the small outer diameter (.040") of the 3F 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 3F catheter yields an easier access for those patients with very diseased vessels as opposed to the larger catheter sizes.

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

STUDIES INDICATE:
8 min. Compression, 2 hr. Release

*Caridi J. et al, Examination of Renal Donors as Outpatients Using Intraarterial Digital Subtraction Angiography and a Pigtail Catheter. AJR:169, August, PPS37-539
**AngiOptic™ Catheters**

The AngiOptic catheter family, available in flush and selective configurations, is a firm tip catheter that provides physicians with many benefits:

- Entire shaft constructed of highly radiopaque material to maximize tip to hub visibility under fluroscopy
- Firm tip material allows for high flow stability
- One-piece shaft and tip construction provides uniform stiffness throughout the catheter, improving pushability
- One-piece construction ensures the tip will not become dislodged or separate

**INDICATION FOR USE:** AngioDynamics® Angiographic Catheters are designed for use where angiographic diagnosis is indicated. **CAUTION:** Federal (USA) law restricts these devices to sale by or on the order of a physician.

**WARNINGS AND PRECAUTIONS:** Reuse of single-use devices creates a potential risk of patient or user infections. Contamination of the device may lead to injury, illness or death of the patient. Reprocessing may compromise the integrity of the device and/or lead to device failure. Contents sterile in unopened, undamaged package. Do not use if opened or any sign of product damage is visible. AngioDynamics Angiographic Catheters should be used only by physicians with a thorough understanding of angiography and percutaneous interventional procedures. AngioDynamics 3 French Angiographic Catheters are not intended for intracranial use. Do not insert catheters directly through synthetic vascular grafts. Insert through a sheath introducer. AngioDynamics Angiographic Catheters are designed for use with specific guidewire diameters. The recommended maximum guidewire diameter is specified on the catheter label. Optimal guidewire size and judicious use are recommended. Please see package insert for complete list of warnings and precautions.

**POTENTIAL COMPLICATIONS:** The following adverse reactions have been reported and are associated with the use of angiographic catheters: Thrombus formation, emboli, arterial wall damage, plaque dislodgment, hematoma, cardiac arrhythmias, myocardial infarction, stroke, and death.

**IMPORTANT RISK INFORMATION**

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