Cook Medical offers a comprehensive family of power-injectable central venous catheters that includes acute lines, PICCs and other long-term central lines with some of the highest flow rates in the industry. For complete information on product usage, indications and contraindications, refer to your chosen catheter’s Instructions for Use document. Institutional policies, procedures and protocols for central venous catheters should be followed.

CT Contrast Power-Injection Guidelines for Cook Medical Central Lines

Power-Injection Procedure

Always practice aseptic technique and handle central lines in accordance with your hospital’s protocol.

1. Confirm catheter is power injectable by locating the CT symbol and the maximum contrast injection flow rate on the clamp or hub. Please note: Not all lumens are power injectable. Look for the appropriate label to determine which lumen is cleared for injection. (Fig. 1, CVC; Fig. 2, PICC)

2. Confirm proper catheter tip position radiographically prior to injection. The catheter tip should be located above the right atrium within the lower third of the SVC. (Fig. 3)

3. Disconnect any infusion device and remove any injection/needleless caps from the catheter lumen that is being used for power injection, per hospital protocol.

4. Confirm catheter patency by attaching a 10 mL syringe filled with sterile normal saline to the hub of the extension tube to be injected. (Fig. 4) Aspirate until blood return is observed, then vigorously flush the lumen with saline and clamp. (Fig. 5) Remove the syringe. Warning: Failure to ensure patency of the catheter lumen prior to injection may result in catheter failure.

5. Prepare the contrast media according to hospital protocol.

6. Attach the catheter following power injector manufacturer’s recommendations. (Fig. 6) Open the clamp and verify that all settings are correct on the power injector before proceeding. Please note: All Cook power-injectable central venous catheters have a maximum pressure limit of 325 psi.

7. Conduct CT contrast study using the power injector, making sure not to exceed the maximum flow rate or pressure limit for the catheter.

8. Clamp the catheter and disconnect it from the power injector. Flush the power-injected lumen according to hospital protocol and recap/reconnect as needed. (Fig. 7)

9. Reconfirm proper catheter tip position radiographically following injection.

For more information, contact your local Cook Medical representative or call toll free: 800.457.4500.