



# Arterial Catheterization Product with Integral Needle Protection

## Rx only.

Integral needle protection is passive in design.

#### Indications:

The Arrow® Arterial Catheterization device permits access to the peripheral arterial circulation. The safety feature is intended to help minimize the risk of sharps injuries when using the device.

#### Contraindications:

None known.

# ⚠ General Warnings and Cautions

#### Warnings:

- 1. Sterile, Single use: Do not reuse, reprocess or resterilize. Reuse of device creates a potential risk of serious injury and/ or infection which may lead to death.
- 2. Read all package insert warnings, cautions and instructions prior to use. Failure to do so may result in severe patient injury or death.
- 3. To minimize the risk of air embolism and blood loss associated with disconnects use only securely tightened Luer
- 4. Practitioners must be aware of complications associated with arterial procedures including but not limited to: septicemia, vessel wall perforation, thrombosis and embolization, hematoma, arterial spasm, tissue necrosis, hemorrhage, peripheral ischemia and infarction, peripheral nerve injury, air embolism, site infection, cellulitis and catheter related blood stream infection (CRBSI).
- 5. In brachial procedures, collateral flow cannot be guaranteed, and therefore intravascular clotting can result in tissue necrosis.
- 6. In radial artery procedures, practitioners must ascertain that definite evidence of collateral ulnar flow exists.
- 7. Accidental infusions of drugs or therapeutics or pressure injection into an arterial system may result in severe patient injury or death.
- 8. Do not attempt to override or defeat the locking needle protection mechanism.
- 9. This device is designed to reduce the risk of accidental needle sticks. However, care must still be taken to minimize the risk of sharps injury. Universal Precautions must be adhered to in accordance with CDC/OSHA standards for bloodborne pathogens, when starting or maintaining any IV catheter, to minimize the risk of exposure to contaminated blood. If catheter and needle are withdrawn together, the needle tip will not be protected.

#### Cautions:

- 1. Do not alter the catheter, guidewire, or any other kit/set component during insertion, use or removal.
- 2. Procedure must be performed by trained personnel well versed in anatomical landmarks, safe technique, and potential complications.

- 3. Some antiseptics used at catheter insertion site contain solvents which can weaken the catheter material. Alcohol, acetone, and polyethylene glycol can weaken the structure of polyurethane materials. These agents may also weaken the adhesive bond between catheter stabilization device and skin.
  - Do not use acetone or acetone-alcohol on or near the catheter surface.
  - · Do not use alcohol to soak catheter surface or allow alcohol to dwell in a catheter lumen to restore catheter patency or as an infection prevention measure.
  - Do not use polyethylene glycol containing ointments at insertion site.
  - · Allow insertion site to dry completely prior to applying
- 4. Indwelling catheter should be routinely inspected for desired patency, security of dressing, and possible migration.
- 5. Use standard precautions and follow established institutional policies and procedures.

Kits/Sets may not contain all accessory components detailed in these instructions for use. Become familiar with instructions for individual component(s) before beginning the procedure.

#### Insertion Instructions

A Suggested Procedure: Use sterile technique.

#### Prepare for Insertion:

- 1. Assess for adequate Collateral Arterial Circulation.
- Use of Ultrasound has been shown to increase success with catheter placement.
- Prep and drape anticipated insertion site per institutional policies and procedures. Where provided contoured outer trays may be used as an arm board.
- 3. Administer local anesthetic per institutional policies and procedures.
  - · A Protected Needle/Safety Needle should be used in accordance with manufacturer's instructions for use
- 4. Remove guard. Trial advance and retract spring-wire guide through needle using spring-wire guide handle to ensure proper function. When spring-wire guide handle reaches the reference mark on spring-wire guide tube, the tip of spring-wire guide is positioned at needle tip.
- ! Caution: Prior to insertion, ensure spring-wire guide is returned to the original position before insertion or blood flashback may be inhibited.

#### Insert Catheter:

- 5. Perform arterial puncture. Blood flashback in clear hub of introducer needle indicates successful entry into vessel (refer to Figure 1).
- (Caution: If both vessel walls are punctured, subsequent advancement of spring-wire guide could result in inadvertent sub-arterial placement.



Figure 1

6. Once a blood flashback has been obtained, decrease the angle of the device to 10-20 degrees from the skin and advance entire placement device a maximum of 1 to 2 mm further into vessel to ensure that catheter is seated within the vessel (refer to Figure 2).

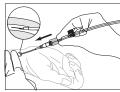


Figure 2

- 7. Stabilize position of introducer needle and carefully advance spring-wire quide into vessel using spring-wire guide handle (refer to Figure 3).
- ⚠ Caution: Do not advance spring-wire guide unless there is free blood flashback in needle hub

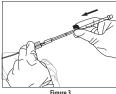


Figure 3

When the reference mark on the clear feed tube coincides with the edge of the internal cylinder of the spring-wire guide handle the tip of the spring-wire guide is located at the needle tip.

- Marning: To reduce the risk of spring-wire guide damage, do not retract springwire guide against edge of needle while in vessel.
- Caution: If resistance is encountered during spring-wire guide advancement do not force feed, withdraw entire unit and attempt new puncture.
- 8. Firmly hold introducer needle hub in position and advance catheter/needle protection assembly, over spring-wire guide into vessel (refer to Figure 4).

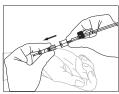


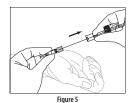
Figure 4

#### Complete Insertion:

- 9. Grasp catheter hub in one hand and needle hub in the other hand (refer to Figure 5).
- (1) Caution: Do not grasp or contact needle protection assembly.

Remove spring-wire guide assembly by withdrawing needle hub longitudinally to vessel. The needle protection assembly will remain attached to proximal end of catheter hub until needlepoint passes through assembly and activates during

(Caution: Listen for audible click to confirm that needle protection assembly has



Visual inspection can also confirm that needle tip is enclosed in needle protection assembly (refer to Figure 6).

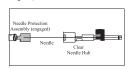
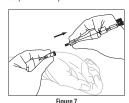


Figure 6

- (Caution: Once the catheter is partially threaded off the needle, do not attempt to advance needle into catheter again – this may cause catheter damage. Do not attempt to remove needle protection assembly from needle.
- 10. Grasp catheter hub in one hand and needle protection assembly in the other hand (refer to Figure 7). Disconnect needle protection assembly from catheter hub. Pulsatile blood flow indicates positive arterial placement.



Secure Catheter:

- 11. Attach stopcock, injection cap or connecting tubing to catheter hub. Secure catheter to patient in preferred manner using suture wings, suture groove or wing clip, where provided.
- Marning: Care should be exercised that the catheter is not inadvertently kinked at the hub area when securing catheter to the patient as this may result in catheter damage, breakage and loss of arterial monitoring capabilities.
- Marning: Do not apply tape, staples, or sutures directly to the catheter body to reduce risk of damaging catheter, impeding catheter flow, or adversely affecting monitoring capabilities. Secure only at indicated stabilization locations.
- (Caution: Avoid placement or securement in an area of flexion.

### Catheter Stabilization Device (where provided):

A catheter stabilization device should be used in accordance with manufacturer's instructions for use.

12. Document insertion procedure.

2

#### Care and Maintenance:

#### Dressing:

Dress according to institutional policies, procedures, and practice guidelines. Change immediately if the integrity becomes compromised (e.g. dressing becomes damp, soiled, loosened or no longer occlusive).

⚠ Caution: Minimize catheter manipulation throughout procedure to maintain proper catheter tip position.

#### **Catheter Patency:**

Maintain catheter patency according to institutional policies, procedures and practice guidelines. All personnel who care for patients with peripheral intravascular devices must be knowledgeable about effective management to prolong catheter's dwell time and nevernt injury.

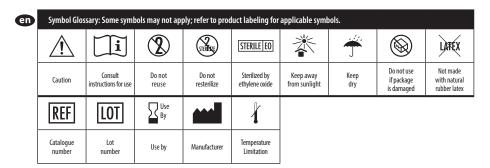
#### Catheter Removal Instructions:

Use aseptic technique per institutional policies and procedures.

- 1. Remove dressing.
- Warning: Do not use scissors to remove dressing to reduce the risk of cutting the catheter.
- 2. Remove catheter securement device or sutures being careful not to cut catheter.

- 3. Remove Catheter slowly.
- Marning: Do not use excessive force in removing catheter. If resistance is met on removal, stop and follow institutional policies and procedures for difficult to remove catheters.
- Warning: Exposure of arterial circulation to atmospheric pressure may result in entry of air into circulation.
- 4. Apply pressure at site after catheter is removed per institutional policies and procedures.
- 5. Cover site with a sterile occlusive dressing.
- Document catheter removal procedure including confirmation that entire catheter length has been removed per institutional policies and procedures.

For reference literature concerning patient assessment, clinician education, insertion technique, and potential complications associated with this procedure, consult standard textbooks, medical literature, and Arrow International, Inc. website:



Teleflex, the Teleflex logo, and Arrow are trademarks or registered trademarks of Teleflex Incorporated or its affiliates, in the U.S. and/or other countries. Other names may be trademarks of their respective owners. © 2016 Teleflex Incorporated. All rights reserved.

Subsidiary of Teleflex Incorporated
2400 Bernville Road | Reading, PA 19605 USA
1-800-523-8446 | 1-610-378-0131



A-04020-133B (3/16)

4