

Epidural Catheter Care Guidelines



CLINICAL CARE GUIDELINES FOR EPIDURAL CATHETERS

The delivery of medications, maintenance, and care of epidural catheters should follow your institution's policies and procedures and your state's nurse practice guidelines.

- ▶ Epidural catheters should be labeled to distinguish them from venous or arterial catheters. (Arrow International, Inc. provides a fluorescent pink identification label that can be applied to the catheter.)
- ▶ Nursing responsibilities may include patient education, site care, dressing change, medication administration, and catheter removal. (This may be an established institution policy and procedure.)
- ▶ During access and maintenance procedures, aseptic technique should be used. Mask and sterile gloves should be worn for access and maintenance procedures.
- ▶ Continuous epidural infusions should be administered via an electronic infusion device.

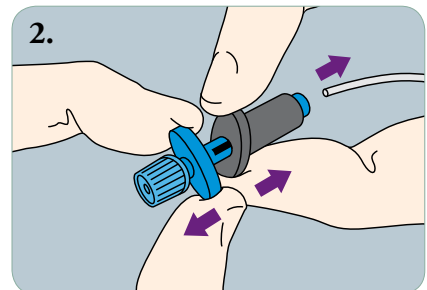
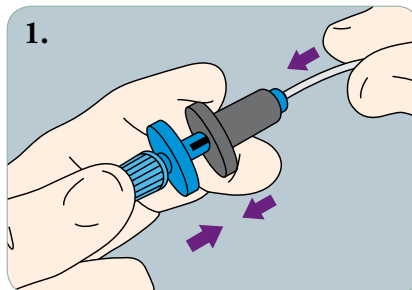
- ▶ Medication infused via an epidural catheter must be preservative-free.
- ▶ Alcohol is contraindicated for site preparation or when accessing the device. A 0.2 μ filter without surfactant should be utilized for medication administration.
- ▶ The patient should be assessed for therapeutic response. Ineffective pain control should be reported to the physician.
- ▶ A physician's order is required for epidural catheter removal. Hospital policy will determine who may remove the epidural catheter (i.e. physician, nurse anesthetist, RN).

Note: Consult product instructions for use for details of procedure.

Principle: Epidural Catheters allow for administration of medication into the epidural space.

SNAPLOCK™ ADAPTER USAGE

1. Closing SnapLock adapter after catheter is fully inserted.
2. How to turn and open SnapLock. See *Instructions For Use* for detailed instructions.

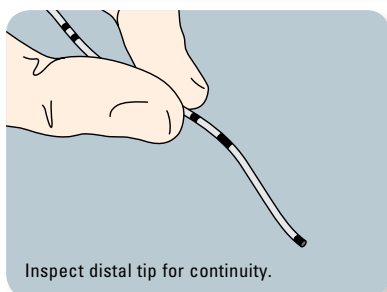
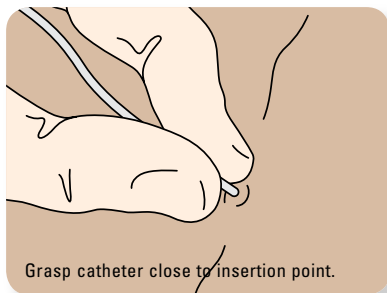


GUIDELINES FOR EPIDURAL CATHETER REMOVAL

1. Remove the catheter by placing the patient in the same position that was used to insert the catheter, such that the vertebral interspaces are open.
2. Grasp the catheter close to the skin and remove slowly with a steady, constant pull force.

NOTE: Under no circumstance should extreme force be applied to the catheter during removal.

3. Cover puncture site with suitable dressing.



PRECAUTION: After removal of catheter, inspect distal tip for continuity. The black dot on the tip will signify that the entire catheter has been retrieved from the epidural space.

SUGGESTIONS FOR CATHETERS THAT RESIST REMOVAL

The outer surface of the FlexTip Plus® Epidural Catheter is a soft polyurethane material. This softness offers many clinical advantages. Occasionally, users encounter a catheter that is more difficult to remove and requires extra care.

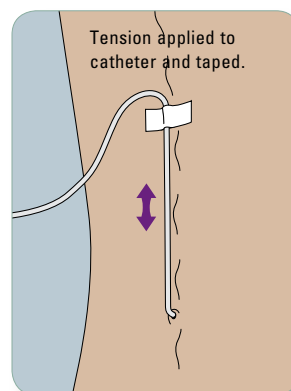
The FlexTip Plus Catheter can withstand significant stretching, but it is not unbreakable. Clinicians should familiarize themselves with the catheter's elongation properties and breakpoint. Resistance is a signal that the patient's anatomy is applying force to the indwelling portion of the catheter.



WARNING: During catheter removal, if resistance is encountered or if the catheter stretches excessively, **STOP**, reposition the patient to open the vertebral interspaces and attempt removal using the following procedure.

If the catheter cannot be withdrawn with minimal force, Arrow International, Inc. recommends the following:

- ▶ Reposition the patient and/or allow the patient to relax for several minutes/hours and attempt removal later. Studies¹ have proven that the force required to remove an epidural catheter can vary dramatically depending on patient's positioning. Arrow recommends that the patient be placed in the same position for removal as they were for placement.
- ▶ In conjunction with bullet #1 above, several clinicians have described how they successfully stretched the catheter slightly and then taped it to the skin, thus creating permanent tension on the catheter. As the patient relaxes and moves, the forces holding the indwelling portion of the catheter diminish and the tension on the catheter (created by stretching and taping) cause it to



automatically retract from the epidural space. This procedure should make it easier to remove, depending on how much catheter is indwelling and how much the catheter is stretched prior to taping it down. This technique may be repeated if necessary.

- ▶ Some clinicians have found that injecting a small bolus of preservative-free saline while removing the catheter has helped. This technique is documented in the literature.²

- 1 Blackshear RH, MD, Gravenstein N, MD, and Radson E, RN, BSN. Tension applied to lumbar epidural catheters during removal is much greater with patient sitting versus lying. *Anesthesiology*. September 1991;75(No. 3A):A833.
- 2 Gadalla F. Removal of a tenacious epidural catheter. *Anesth Analg*. 1992;75:1070. Letter.

Caution: U.S. Federal Law limits this device to sale by or on order of a physician. Contents of unopened, undamaged package are sterile. Disposable. Refer to package insert for current warnings, indications, contraindications, precautions, and instructions for use.

ARROW
INTERNATIONAL

Distribution Worldwide:

Arrow offices are located in Belgium, Canada, Czech Republic, France, Germany, Greece, India, Italy, Japan, Mexico, Netherlands, Slovakia, South Africa, Spain, United Kingdom and the United States.

Arrow International, Inc., 2400 Bernville Road, Reading, PA 19605 U.S.A. Tel: 610.378.0131
www.arrowintl.com

EPDCG-S 04/2007 CRB-07-0106

© 2007 Arrow International, Inc. U.S.A. All rights reserved. Printed in the U.S.A.

