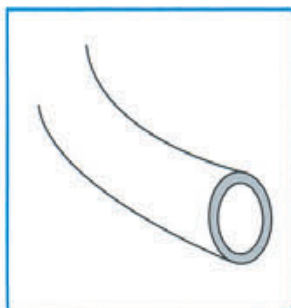
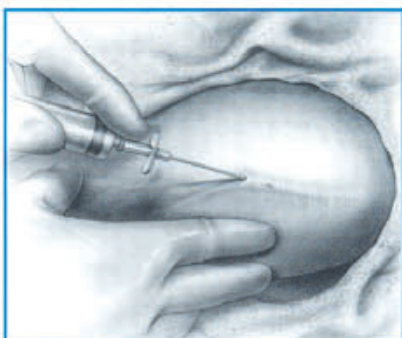
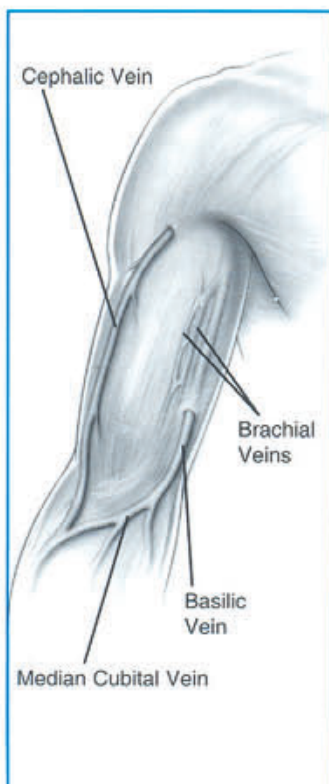


Bard Access Systems

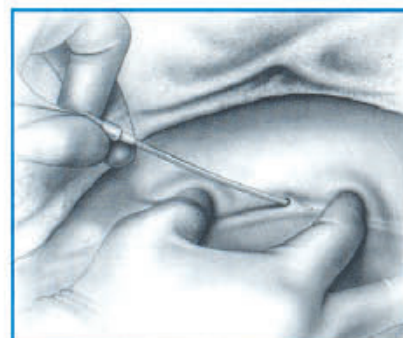
BardPort™ Low Profile Port With Open-Ended Catheter



Key Steps For Arm Implantation Using Radiological Techniques



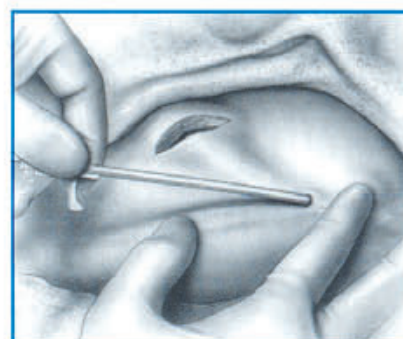
1 Identify suitable vein in upper arm by ultrasound (US) or venography, and access with a small gauge needle utilizing US/venographic guidance.



2 Insert guidewire through needle. Remove needle and insert transition dilator and sheath over the guidewire. Remove guidewire and dilator, confirm location and flush.



3 Select a suitable site for a subcutaneous pocket that facilitates port access. Placement should consider the amount of cutaneous tissue over the port, as well as port stabilization. Make a small skin incision and dissect the subcutaneous pocket. A tissue thickness of 0.5cm to 1.5 cm is generally considered appropriate. Hemostasis within the pocket should be achieved.



4 Insert larger guidewire through transition sheath and remove sheath. Place introducer sheath and dilator over the guidewire and advance into the vein. Remove guidewire and dilator and leave sheath in place.



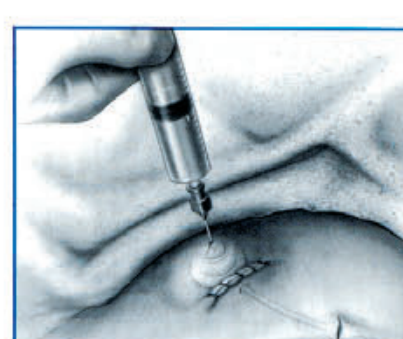
5 Place catheter (pre-primed with normal saline) into venous system through introducer sheath. Catheter tip should rest at the SVC-RA junction. A guidewire may be needed to direct catheter to required location. Remove introducer sheath.



6 Make tunnel (if needed) to connect the subcutaneous pocket to the venous access site.



7 Place catheter through tunnel and cut to length. Attach catheter to port, aspirate blood and flush. Secure port in pocket with sutures.



8 Close pocket. Access port, aspirate blood, and flush system with heparinized saline.