

Venous Access Device Placement (Port, Tunneled or Nontunneled Catheter)

INTRODUCTION

A catheter is a small tube that is inserted underneath skin so that there is a simple, pain free way for doctors or nurses to draw blood and give medications or nutrients.

PROCEDURE

The insertion of a venous access device involves the placement of a plastic intravenous tube (catheter) through your skin and into a vein. Some numbing medicine will be injected in the skin over the site that will be used before the catheter is inserted. Intravenous medications may also be given to you to make you more comfortable and relaxed. This is known as conscious sedation.

Once the catheter has been inserted into the skin, it will either be tunneled under the skin until it reaches the designated vein or inserted directly into the vein and then advanced through the blood vessels to the proper location. If a port is placed a small incision will be made to insert it under the skin, and the incision is closed with sutures.

Tunneled and nontunneled catheters are held in place with sutures. To assist with proper location of the catheter, x-ray contrast material (x-ray dye) may be injected through the catheter and x-ray pictures taken. You may be asked to hold your breath for several seconds as these pictures are taken. During the injection of x-ray contrast material, you may experience a warm feeling or a strange taste in your mouth. Both of these sensations are temporary and will go away soon.

RISKS

Risks associated with the procedure include those associated with the insertion and positioning of the catheter and those associated with the maintenance and use of the catheter. Associated with the insertion and positioning of the venous access device are the risks of pain or discomfort at the catheter insertion site, bleeding at the site, injury to a blood vessel, entrance of air into the vein (air embolus), injury to the lung (pneumothorax), and infection which may result in an infection of the blood stream. Risks associated with the x-ray contrast material include an allergic reaction and reduced kidney function. The medications used for the conscious sedation are associated with the risks of aspiration (inhaling food or liquid into your lungs) or respiratory depression. Risks associated with the maintenance and use of the venous access device include an infection of the catheter which may result in an infection of the blood stream, inflammation of the vein (phlebitis), and the development of a blood clot in the vein (thrombosis). In addition to these potential risks associated with the procedure, the x-ray contrast material, and the conscious sedation medications, there may be other unpredictable risks including death.

ALTERNATIVES

Alternatives to the placement of a venous access device include the insertion of a surgically placed central line or continuing with peripheral IV access which requires replacement of a new line every 72 hours. If you are unsure about having a venous access device placed, please discuss these other alternatives with your physician.