

The Tunneled Catheter

What is a tunneled catheter?

A tunneled catheter is a small tube made of a material called silicone. It is called “tunneled” because it is inserted into a large vein and tunneled under the skin to a place where it exits your body. In this handout, we will simply refer to it as a catheter.

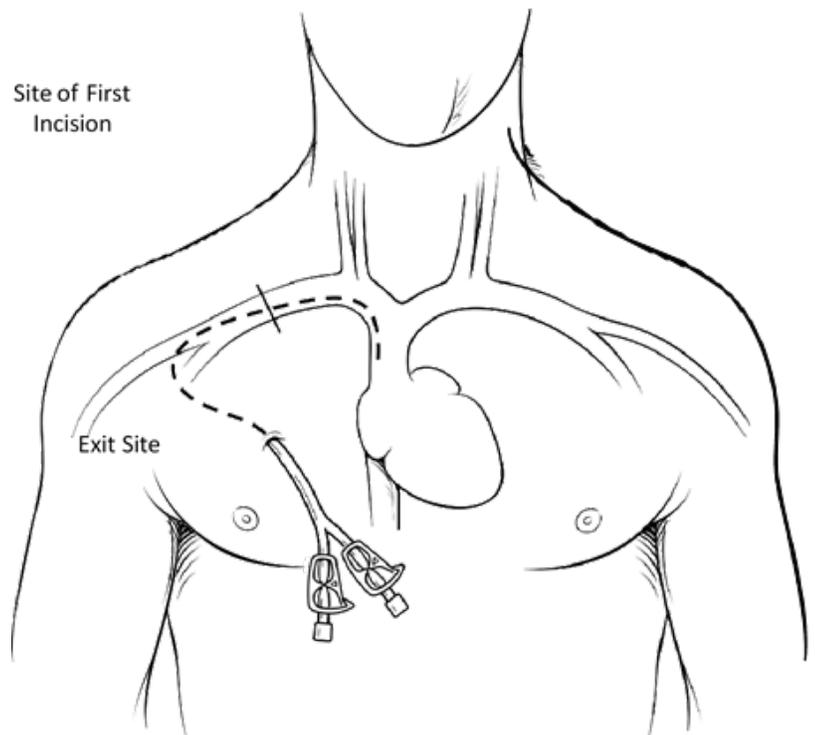


Why are tunneled catheters used?

A catheter is used to give medications, fluids, blood products, chemotherapy, stem cells, or nutrition through a vein. It may also be used for drawing blood or for apheresis.

How is the catheter inserted?

The catheter is inserted in an operating room or radiology department and should take about 30-60 minutes. The practitioner makes a small opening in the mid-chest area. Another opening is made where the catheter enters the vein. A tunnel is formed under the skin between the two openings. The catheter is passed through this tunnel and then gently threaded until the tip is near your heart in the large vein called the superior vena cava. After placement, the catheter will be checked to confirm it is in the right position.



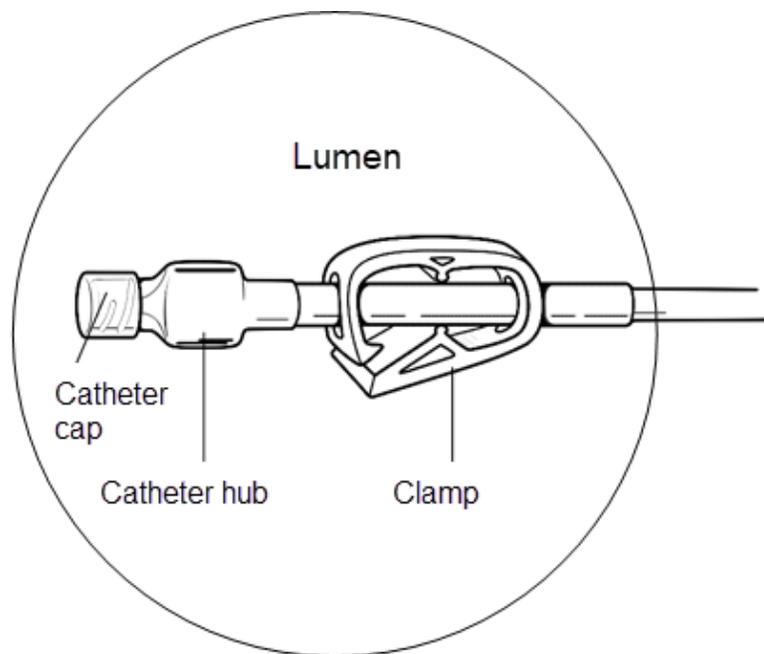
What is a cuff?

Most catheters have a small cuff that lies beneath the skin about one to four inches from the exit site. The cuff serves two main purposes:

1. The cuff holds the catheter in place by forming scar tissue. Scar tissue will grow around the cuff after 1-2 weeks, making it difficult to pull the catheter out.
2. The cuff helps protect against infection by blocking bacteria from entering the exit site.

What is a lumen?

The word lumen means the opening or path that is inside the catheter. It is through this opening that you give medications or blood can be drawn. We also use this word to describe the ends of the catheter that are outside your body. You will notice that your catheter has 1, 2, or 3 lumens (see image below).



Adapted from "Care of the Tunneled Catheter" Manual, 2016