

What is the PleurX Catheter?

The pleura is the membrane that lines your thoracic (chest) cavity and covers your lungs. There is a small space between the layers of your pleura, which contains a small amount of fluid that serves as a lubricant for the two layers of the pleura. Pleural effusion is the buildup of pleural fluid in the pleural cavity. This fluid buildup makes it difficult to breathe and causes shortness of breath and chest pain.

Fluid can be managed in a number of ways including medication, obliteration of the space with chemical agents, or when these methods are unsuccessful, by drainage via catheter.

The catheter is a thin, flexible tube that is placed in the pleural space to drain the fluid buildup associated with pleural effusion. Traditionally, treatment for chronic pleural effusion has required patients to remain in the hospital. The catheter allows you to manage your pleural effusion at home. The device consists of a catheter that is placed in the pleural space through a small incision. The catheter is connected to a vacuum bottle. When you open a valve at the end of the catheter, fluid drains into the vacuum bottle.

How to Prepare

Your physician will provide you with specific instructions about how to prepare for your procedure.

We recommend wearing comfortable clothing, and you may like to arrange for a companion to wait with you at the hospital, and for a ride home after treatment is complete.

What to Expect

Placement of the catheter is minimally invasive. You will be asked to lie on your side, and your physician will determine the best place to insert the catheter. He or she will use a local anesthetic to numb the area in which the catheter will be inserted. Your physician inserts a needle into the pleural space, inserts a guidewire through the needle, and removes the needle. He or she makes a tunnel for the catheter by making a small incision at the guidewire insertion site and another small incision about two inches below the first incision. Your physician inserts the catheter into the lower incision and advances it until the end of the catheter is through the second incision. Your physician advances the catheter into the pleural space over the guidewire, and then removes the guidewire.

Once your physician has the catheter in place, he or she will close the incision at the insertion point with sutures, suture the catheter to the skin below the lower incision, and close the lower incision with sutures. The catheter can then be connected to the vacuum bottle.

Recovery

Your physician will instruct you and any caregivers on how properly to operate the catheter. Typically, you should drain the fluid every one to two days. Although your physician will provide you with specific instructions, you should avoid draining more than 1,000 to 1,500 milliliters per day. The catheter will remain in place as long as fluid builds up in your chest. However, once fluid is no longer building up, it may be removed.