## How to Drain Using the PleurX Lockable Drainage line Kit

The PleurX Lockable Drainage Line Kit is indicated for use only with the PleurX Catheter for intermittent drainage. The PleurX Lockable Drainage Line Kit is used to drain fluid using standard wall suction, water seal drainage system, glass vacuum bottle, or other appropriate method (e.g. portable suction).

The drainage and self-adhesive dressing procedures should be performed using aseptic technique. The patient should be drained as directed by their doctor. Do not change frequency or drain more fluid than their doctor has recommended without first consulting their doctor. The volume of fluid removed should be based on the individual patient's status and the risks for over draining, including re-expansion pulmonary edema in the chest or hypotension for ascites patients (max 1000 ml of fluid from the chest and 2000 ml of fluid from the abdomen within 24 hours).

Make sure you are familiar with the suction method prior to draining.

**Chest:** Potential complications of draining the pleural space include, but may not be limited to, pneumothorax, re-expansion pulmonary edema, hypotension, circulatory collapse and infection.

**Abdomen:** Potential complications of draining fluid from the abdomen include, but may not be limited to, hypotension, circulatory collapse, electrolyte imbalance, protein depletion, ascites leakage, peritonitis, wound infection, and loculations of the peritoneal space.

#### Contact the patient's physician if:

- The patient develops fever (body temperature above 100.5° F (38°C), or you notice any redness, swelling, oozing or pain at the exit site. These may be signs of infection that may require treatment.

- Shortness of breath is not relieved after draining 1000 ml from the chest or 2000 ml from the abdomen at one time.

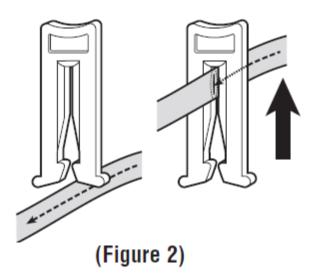
- The patient continues to experience symptoms, but little or no fluid drains from the catheter.
- Less than 50 ml drainage in three (3) drainage procedures in a row.
- The appearance (color, thickness, etc.) of the fluid changes significantly between drainages.

#### Prepare to Drain

Do not use scissors or other sharp objects near the PleurX Catheter.

The patient should not be left unattended during drainage.

The blue **emergency** slide clamp should be used if you accidentally cut the catheter or damage the valve. **(Figure 2)** 



1. Set up a clean, clear workspace on a table or counter.

2. Thoroughly wash your hands with soap and water.

3. Remove the self-adhesive dressing from over the catheter. Be sure not to tug on the catheter: support the skin while removing the dressing, gently grasp one edge and slowly peel the dressing from the skin. Avoid skin trauma by peeling the dressing back, rather than pulling it from the skin.

4. Thoroughly wash your hands again with soap and water.

5. Open the PleurX Lockable Drainage Line Kit.

6. Set packet with blue wrap on your workspace with the flap side up. Carefully unfold the blue wrap by pulling on the outside of the wrap. Leave the enclosed items on the wrap.

7. Pick up gloves by the folded cuff and put on as shown. Both gloves fit either hand. Be careful not to let the outside of the gloves touch anything non-sterile, such as your skin or clothing. Put on gloves.

8. Tear open three alcohol pads, but do not remove the pads from their pouches. Place them on the blue wrap.

### **Connect the Lockable Drainage Line to Wall/Portable Suction**

Keep the valve on the PleurX Catheter and the access tip on the drainage line clean. Keep them away from other objects to help avoid contamination. Do not put anything except the access tip of the drainage line into the PleurX Catheter valve since this could damage the valve. A damaged valve may allow air into the body or let fluid leak out through the valve when not draining.

1. Close the roller clamp completely by rolling the wheel on the roller clamp toward the suction

source. The roller clamp must be fully closed to occlude the drainage line. When not connected to a suction source, make sure the roller clamp is fully closed; otherwise the drainage line may allow air into the body or let fluid leak out.

2. Attach the 5-in-1 adapter to the Luer fitting on the drainage line. (Figure 7)

3. Connect the 5-in-1 adapter to the vacuum/suction source.

4. Remove the protective cover by twisting it and pulling gently. Take care to avoid contaminating the access tip. (Figure 8)

5. Hold the base of the catheter valve and remove the cap by twisting it counterclockwise and pulling gently. Discard the cap. Take care to avoid contaminating the valve.

6. Clean around the valve opening with a new alcohol pad.

7. Insert the access tip into the catheter valve and advance it completely into the valve. You will feel and hear a click when the access tip and valve are securely connected. **(Figure 11)** 

8. If desired, lock the access tip to the catheter valve by twisting the access tip until you feel and hear a second click. (Figure 12)

Make sure that the valve and the access tip are fully connected when draining. If they are accidentally separated, they may become contaminated. If this occurs, clean the valve with an alcohol pad and use a new drainage line to avoid potential contamination.

# **Drain Fluid**

It is normal to feel some discomfort or pain when draining fluid. If discomfort or pain is experienced when draining, roll the wheel on the roller clamp toward the suction source to slow or stop the flow of fluid for a few minutes. If severe pain or discomfort persists, contact the physician. Pain may be an indication of infection.

Do not drain more than 1000 ml of fluid from the chest or 2000 ml of fluid from the abdomen at any one time.

1. Roll the wheel on the roller clamp away from the suction source to begin drainage. **(Figure 13)** When fluid begins to flow into the drainage line you may partially close the roller clamp to slow the flow of fluid by rolling the wheel on the roller clamp toward the suction source.

2. If you need to change to a new glass vacuum bottle/canister/water seal device for any reason, close the roller clamp completely by rolling the wheel on the roller clamp toward the suction source. Remove the drainage line from the vacuum/suction source and connect to a new glass vacuum bottle/canister/water seal device. Roll the wheel on the roller clamp away from the suction source to resume draining.

3. When flow stops or the desired amount of fluid has been removed, close the roller clamp completely by rolling the wheel on the roller clamp toward the suction source. **(Figure 6)** 

# **Finish Drainage**

1. If locked, twist the access tip to unlock it from the catheter valve.

2. Pull the access tip out of the valve in a firm, smooth motion. Set the used drainage line down.

3. Clean the catheter valve with a new alcohol pad. Discard the alcohol pad.

4. Place the new cap over the catheter valve and twist it clockwise until it clicks into its locked position. Cap might feel loose until it is locked into place.

5. If required, record the drainage volume.

6. Disconnect the suction source and dispose of the used drainage line and glass vacuum bottle/canister/water seal device in accordance with applicable local regulations. If fluid spills, use soap and water to clean skin and use appropriate cleaning agent for all other surfaces.

### Place a New Self-Adhesive Dressing (optional for home due to pricing)

1. Clean around the catheter exit site with a new

alcohol pad. Make sure the exit site and skin around the catheter are dry before completing the self-adhesive dressing procedure.

- 2. Place the foam catheter pad around the catheter.
- 3. Wind the catheter into loops and place it over the foam pad.
- 4. Cover the catheter with up to four (4) gauze pads.
- 5. Remove gloves from both hands.
- 6. The self-adhesive dressing has three (3) layers:
- a. printed liner
- b. clear wound dressing
- c. center panel and frame backing

7. Peel the printed liner from the self-adhesive dressing, exposing the adhesive surface.

- 8. Center the self-adhesive dressing over the gauze pads and press it down.
- 9. Remove and discard the center panel from the backing of the self-adhesive dressing.

10.Slowly remove the frame while smoothing down the dressing edges.

11.Smooth the entire dressing from the center toward the edges using firm pressure to enhance adhesion.

Figure, Abb, Figura, Afbeelding, Figur, Kuva, Eukóv $\alpha$ , Şekil

