A CLINICIAN'S TROUBLESHOOTING GUIDE

Should you have questions at any time, Merit Medical offers a 24/7 dedicated Aspira Medical Services & Support line at 833–3ASPIRA (833–327–7472).

Is There Pain During Fluid Drainage?

Aspira Drainage system

Pain during fluid drainage can be caused by draining fluid too quickly. If the patient experiences pain while draining with a bag, raise the bag to slow the flow. Disconnect the bag to stop the flow. If the patient experiences pain while draining with a bottle, adjust the roller on the drainage line to pinch the drainage line down. The bottle may also be closed by turning the handle clockwise (approximately half a turn).

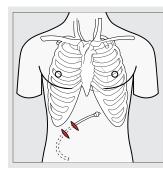
Is There Fluid Leakage Around the Catheter Site?

Fluid leakage around the catheter site can be caused by one of the following:

Catheter displacement with fenestration in the tunnel

track. Catheter exchange is required. When inserting a new catheter, make sure all of the catheter fenestrations are inside the pleural or peritoneal space during insertion (verify by checking for the barium stripe using fluoroscopy or X-ray). Avoid excessive tension on the external catheter segment or valve. Secure catheter to prevent excessive tension.

Peritoneal catheter is tunneled downward rather than superior and medial to the insertion site. Catheter exchange is required. Refer to tunneling instructions below as well as the Aspira Peritoneal Drainage Catheter Instructions for Use to ensure proper tunneling technique.



Peritoneal Catheter Tunneling Technique

Make an incision at the desired catheter insertion site. Make another incision superior and medial to the insertion site at a distance selected for tunnel length (generally 5–8 cm)

Clogged drainage holes and fluid buildup in chest or abdomen. Refer to Is There Slow or No Drainage?, Solution #3: Occlusion management section in the next column.

Excessive pressure in the abdomen due to fluid or internal organ enlargement leading to back pressure and fluid leakage. Increasing the frequency of drainage may help to alleviate pressure. Please call Medical Services & Support at 833–327–7472 if you suspect that this is the cause.

Is There Slow or No Drainage?

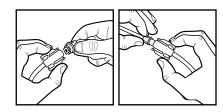
Drainage volumes can vary over time. If a patient is unable to drain as much fluid as expected, this could be due to several reasons, including:

- Decrease in fluid buildup;
- Loculations (pockets of fluid located away from drainage fenestrations); or
- Catheter or valve partially or totally occluded.

If there is reason to believe that the patient has fluid to drain but has been unsuccessful at doing so, please follow these steps below.

Solution #1: Check drainage line connections

Ensure that there is no kinking or clamp on the catheter. Make sure drainage bag is positioned below the area that needs to be drained.



Check the connection of the catheter valve to the bag or bottle. Disconnect and reconnect the bag or bottle. You should hear an audible click indicating that the connection is secure.

If using a bag, gently squeeze the pump again. If using a bottle, rotate the handle counterclockwise, until the arrow in the handle lines up with the drainage line (approximately half a turn). If this does not work, try to reposition the patient. The presence of loculations around the fenestrations of the catheter can cause drainage to be reduced at certain positions.

Solution #2: Use new drainage kit or alternative drainage method

If drainage flow does not initiate after attempting Solution #1, try using a new drainage kit, making sure that the connection is secure by listening for an audible click. Alternatively, low suction can be used by connecting the Aspira Universal Tubing Adapter. If this does not work, proceed to Solution #3

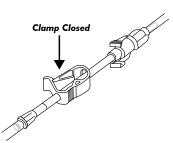
Solution #3: Occlusion management

If Solution #1 and #2 are unsuccessful, this could indicate presence of an occlusion, protein buildup, or a clot.

Obtain a physician order to flush the catheter with saline per facility protocol. A 10 mL syringe and the Aspira Luer Adapter (Product code 4992305) can be used to facilitate flushing.

CAUTION:

• Flush saline through adapter prior to connecting to the catheter to eliminate presence of air.



 When using the Luer Adapter or

> Universal Tubing Adapter to access the catheter, the adapter must be attached to the syringe or wall suction line prior to attachment to the catheter.

• The Luer Adapter and Universal Tubing Adapter create an open pathway into or out of the catheter; to close the pathway when not in use, tighten pinch clamp.

Prior to flushing, you can attempt to aspirate the catheter with a partially filled syringe. This may loosen or free any debris that may be in the valve.

Do not flush against resistance. Resistance to flushing may indicate an occlusion. In this case, you can replace the valve using an Aspira Valve Repair Kit (product code 4992306), following the instructions in the Aspira Valve Replacement Instructions section in the next column.

If repairing the valve does not work, this could indicate that the fenestrations on the distal end of the catheter have been occluded by protein buildup or a fibrin sheath. A physician can flush thrombolytic agent per facility protocol using the Aspira Luer Adapter (product code 4992305).

Aspira Valve Replacement Instructions

Do not connect the Aspira valve to other manufacturer's drainage systems, as this will result in damage to the valve.

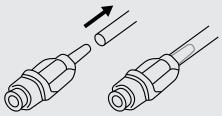
CAUTION: Be careful not to dislodge the catheter during the valve replacement process.

NOTE: The catheter should be clamped between the valve and the exit site. Ensure that the catheter is clamped and remains clamped throughout the repair procedure.

1. Inspect the catheter to determine where it needs to be cut off. Do not cut at this time.

NOTE: Be sure to retain as much of the external catheter length as possible.

- 2. Make sure the catheter is clamped at least 5 cm distal to the cutoff point.
- 3. Clean the catheter with alcohol and/or povidone iodine wipes, where it will be cut off.
- 4. Using sterile scissors, cut the catheter at a 90° angle distal to the existing valve.
- 5. Advance the catheter over the new valve stem past the shoulder on the valve.



NOTE: If the catheter and new valve are connected and then disconnected, trim the proximal end of the catheter and attach a new valve to ensure a secure connection.

- 6. Remove slide clamp from catheter.
- 7. Place a new cap over the catheter valve.

If you have any additional questions, please contact the 24/7 dedicated Aspira Medical Services & Support line at 833–3ASPIRA (833–327–7472).

Before using refer to Instructions for Use for indications, contraindications, warnings, precautions, and directions for use.

MA MERITAEDICAL

Understand. Innovate. Deliver.**

merit.com | myaspira.com

Merit Medical Systems, Inc. 1600 West Merit Parkway South Jordan, Utah 84095 1.801.253.1600 1.800.35.MERIT Merit Medical Europe, Middle East, & Africa (EMEA) Amerikalaan 42, 6199 AE Maastricht-Airport The Netherlands + 31 43 358 82 22 Merit Medical Ireland Ltd. Parkmore Business Park West Galway, Ireland + 353 (0) 91 703 733