	<p>POLICIES & PROCEDURES</p> <p>Title: DRAINS: Care of</p> <p>I.D. Number: 1100</p>
<p>Authorization</p> <p><input type="checkbox"/> Board of Directors</p> <p><input type="checkbox"/> MAC Motion #:</p> <p><input checked="" type="checkbox"/> SHR Nursing Practice Committee</p>	<p>Source: Nursing</p> <p>Cross Index:</p> <p>Date Revised: May 2016</p> <p>Date Effective: May 2002</p> <p>Scope: SHR and Affiliates</p>

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For the purpose of this policy, client will be used when referring to clients, patients, and residents.

Definitions:

Drains are tubes that are placed either percutaneously by interventional radiology or surgically in the operating room in order to drain extravascular blood and/or fluids.

Drains are classified under 2 headings: passive or active

- **Passive drains** are ones that rely on either gravity or the difference in pressure between the body cavity and the outside to allow fluid to passively flow. The drainage can either be collected in a dressing or in a collection bag. Examples of these types of drains are penrose drains.
- **Active drains** are ones that use negative pressure to remove fluid from an area inside the body to a collection container outside of the body. Examples are the Jackson Pratt or Hemovac.

Note: For the purposes of this policy, the drains included do NOT include pleural drains or chest tubes. For those types of drains, please see the "Chest Tubes – Assisting with Insertion, Care of, Assisting with Removal" policy # 1113.

1. PURPOSE

- 1.1 To maintain patency of drains.
- 1.2 To minimize the risk of infections, damage, displacement and other complications associated with the care of drains.

2. POLICY

2.1 **Registered Nurses (RNs), Graduate Nurses (GNs), Registered Psychiatric Nurses (RPNs), Graduate Psychiatric Nurses (GPNs), Licensed Practical Nurses (LPNs) and Graduate Licensed Practical Nurses (GLPNs)** will:

- Empty wound drains
- Change dressing to drain site
- Shorten and remove passive (Penrose) drains on practitioners order
- Flush drains on practitioner order
- Remove specific active drains (ex. Hemovac, Jackson-Pratt) on practitioner order. See Appendix A.

- 2.2 Active wound drains are emptied as needed to monitor drainage, maintain suction and reduce weight in the receptacle. Monitor drainage more frequently in the immediate post insertion period.

Note: One study has shown that 10 mL of drainage in a 100 mL Jackson Pratt drain can decrease the suction by almost 50 mmHg. Therefore, drains should be emptied more frequently (Carruthers, Eismann, & Kocak, 2013, p40).

- 2.3 Stripping of drains is not recommended. EXCEPTION - for mastectomy clients, see Appendix B.
- 2.4 All drains except penrose drains should be secured using a drain securement device. Drain securement devices should be changed weekly or as per manufacturer's guidelines. Follow manufacturer's guidelines for application and use.

3. PROCEDURE

3.1 Drain Site Care

- 3.1.1 Monitor and document the appearance of the drain insertion site every shift and prn to assess for:
- Redness
 - Swelling
 - Discharge – color, consistency and amount
- 3.1.2 For drain site care see Perry, Potter & Ostendorf, Clinical Nursing Skills & Techniques, 8th Edition, 2014. Pg. 948-950.

3.2 Emptying Closed Wound Drains

- 3.2.1 Supplies:
- graduated container for each drain
 - clean gloves
 - face shield
 - alcohol swabs
- 3.2.2 Perform hand hygiene then don clean gloves and faceshield.
- 3.2.3 Remove plug from pouring spout, keep it from touching any non-sterile surfaces.
- 3.2.4 Tip drainage receptacle and pour the drainage into a graduated container, being careful not to touch the pour spout on the container.
- 3.2.5 Scrub the drainage port for 15 seconds with an alcohol swab prior to replacing the plug into the pour spout of the drainage system.
- 3.2.6 If the drain is an active drain, gently squeeze the drainage receptacle to remove all of the air and re-establish suction.
- Note:** For Jackson Pratt drains, use a side to side squeeze technique to compress the bulb as it results in a higher peak suction for the drain over a bottom up technique (Carruthers, Eismann, & Kocak, 2013, p40).
- 3.2.7 Measure the drainage by holding the container at eye level. Note the amount, color, consistency and odor of the drainage.

- 3.2.8 Discard drainage in toilet. Drainage receptacles must be discarded after each use. Drainage receptacles are not to be shared between patients.
- 3.2.9 Doff gloves and perform hand hygiene.
- 3.2.10 Inspect dressing to drain site and change if required.
- 3.2.11 Document:
 - Amount of drainage, color, consistency and if any odor present from each drain on appropriate record.
 - Number drains if more than one and record amount of drainage from each separately.
 - Report excessive drainage or lack of drainage to practitioner.

3.3 Shortening of Passive (Penrose) Drain

- 3.3.1 Supplies:
 - Clean gloves
 - Sterile gloves
 - Face shield with mask
 - Dressing supplies
 - Dressing set
 - Suture removal supplies (if required)
 - Sterile pin
 - Two sterile forceps
 - Sterile normal saline
 - Sterile scissors
- 3.3.2 Check practitioners order for length in centimeters the drain is to be shortened.
- 3.3.3 Explain procedure to client and/or family and provide analgesia if required. Pediatrics: second person may be required to assist with infant/young child.
- 3.3.4 Check if drain is sutured in place (Operating Room Record).
- 3.3.5 Perform hand hygiene then don clean gloves and faceshield before removing soiled dressing.
- 3.3.6 Discard dressing and soiled gloves.
- 3.3.7 Perform hand hygiene and reglove with sterile gloves. Clean incision and drain area with sterile normal saline.
- 3.3.8 If drain is sutured, clamp sterile forceps onto drain (to prevent drain from slipping into wound) and remove sutures.
- 3.3.9 Support skin around drain site with sterile forceps. Using second sterile forceps, pull ordered amount of drain out. Move supporting forceps to bottom edge of visible part of drain. Using second forceps, insert new sterile pin into drain close to the skin (see Figure 1). Leaving 2 cms of drain above newly inserted pin, take sterile scissors and cut drain between the 2 pins (see Figure 2).

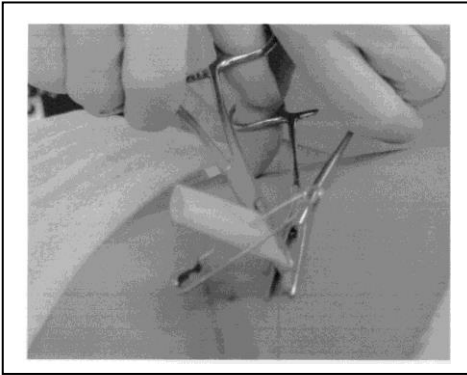


Figure 1

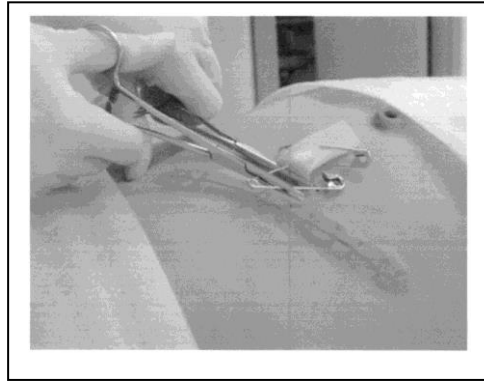


Figure 2

Note: Report if entire drain inadvertently removed

3.3.10 Document:

- Date and time of drain shortening and when drain removed due to shortening
- Amount drain shortened
- Appearance of skin at drain site
- How drain was secured (ex. sterile safety pin)
- Dressing applied
- Client tolerance of procedure
- Complications and interventions

3.4 Flushing of Drain

Note: Drains may be ordered to be flushed in order to maintain patency. This may be done not only in hospital, but nursing staff may be required to teach the client &/or their family to flush the drain at home on discharge if ordered by the practitioner.

3.4.1 If not already in situ, place a 4 way stopcock (SKU#40090) (see Figure 3) with a Microclave® Clear adapter (SKU # 206083) on the flush port (see Figure 4) between the drain and the collection bag ensuring aseptic technique during the process.



Figure 3



Figure 4

3.4.2 Check practitioners order for type of solution, volume and frequency.

3.4.3 Explain the procedure to the client and/or family.

3.4.4 Perform hand hygiene then don clean gloves and faceshield.

3.4.5 Scrub the hub of the Microclave® with an alcohol swab for a minimum of 15 seconds and allow it to dry.

3.4.6 Attach syringe with ordered solution and amount of flush to Microclave®. Turn the stopcock so the middle arrow points to the client and slowly flush the drain.

Note: *The speed of flush depends on the clients comfort. If the flush is uncomfortable or painful, try flushing slower. If it is still painful, stop the flush and notify the practitioner.*

3.4.7 Turn the stopcock so the middle arrow points back to the Microclave® then disconnect the syringe. Do not aspirate flush back.

3.4.8 Add the volume of flush to the fluid balance record or the appropriate clinical record in your area.

3.4.9 Assess the drainage bag for the return of flush and its volume amount.

3.4.10 Document the flush and client's tolerance of the procedure.

3.5 Draining Fluid with a PleurX® Drain

Note: *For the purposes of this policy, the drains included do NOT include pleural drains or chest tubes. For those types of drains, please see the "Chest Tubes – Assisting with Insertion, Care of, Assisting with Removal" policy # 1113.*

3.5.1 Obtain/check order from practitioner for amount of fluid to drain from peritoneal space (do not drain more than 2 litres at one time).

3.5.2 Order PleurX® kit from SPD #202629 which includes:

- 500 ml canister
- Self-adhesive dressing
- Alcohol swabs
- Sterile gloves
- Cap for catheter
- Slide clamp
- Gauze and catheter pads

3.5.3 Perform hand hygiene and don clean gloves.

3.5.4 Remove dressing from PleurX® drain. Discard.

3.5.5 Doff gloves and do hand hygiene.

3.5.6 Open PleurX® Kit and place PleurX® canister on table

3.5.7 Open procedure pack that contains sterile field and sterile gloves.

3.5.8 Don faceshield.

3.5.9 Set up sterile field and don sterile gloves.

3.5.10 Open the valve cap package and place the new valve cap on the sterile field.

3.5.11 Open the 3 alcohol swab packages but leave the swabs in the packages on the sterile field.

- 3.5.12 Close the clamp on the drainage line to the canister and remove the cover from the canister line and place it on sterile field
- 3.5.13 Remove the catheter cap (twist and pull) from the client end of the catheter and discard the cap
- 3.5.14 Clean around the catheter valve with alcohol pad. Once dry, insert the drainage line into the catheter valve, you will hear and feel a click when they are locked.
- 3.5.15 Remove the support clip on the top of the canister then push the white "T" shaped plunger down
- 3.5.16 Open the clamp on the drainage line. The fluid should now flow into the canister.

Note: *The client may experience some pain while fluid is being drained. If it becomes too painful, clamp off the drain for a few minutes to give the client a rest. Try draining again. If it is still too painful, stop procedure and call practitioner.*

- 3.5.17 Once complete, clamp the tubing then pull the tip from the valve and set the drainage line down
- 3.5.18 Clean the valve with an alcohol swab and place new cap over it.
- 3.5.19 Clean around the catheter with alcohol swab and once dry place foam pad around the catheter. Loop the catheter around and place on top of the foam pad. Place gauze pad over top of the catheter and cover with adhesive dressing.
- 3.5.20 Discard the PleurX® drainage bottle into the hazardous waste container. Home care and Long Term Care staff will open the top of the canister and pour the contents into the toilet. Flush the toilet and then dispose of the bottle in the client's garbage.
- 3.5.21 Doff gloves and face shield and do hand hygiene.
- 3.5.22 Document:
 - Date, time, color and amount of drainage removed
 - Appearance of skin at drain site.
 - Dressing applied
 - Client's tolerance of the procedure

Note: *For video on how to access PleurX® catheter, drain fluid and change dressing, go to <http://www.carefusion.com/our-company/video-gallery?video=3583195592001>*

3.6 Removal of Passive or Active Drains

Note: *See Appendix A for which drains can be removed by nursing staff.*

Note: *Drains placed in the head must be removed by a practitioner.*

3.6.1 Supplies:

- Dressing set
- Dressing supplies
- Suture removal set (if required)
- Clean gloves
- Sterile gloves or sterile 4x4's
- Face shield
- C&S container if culture is ordered
- Sterile scissors
- Sterile normal saline

3.6.2 Check practitioners order for drain removal and if drain tip is to be sent for C&S.

3.6.3 Explain procedure to client and/or family and provide analgesia if required.
Pediatrics: second person may be required to assist with infant/young child.

3.6.4 Perform hand hygiene then don clean gloves and face shield.

3.6.5 For active drains, release suction from drain and empty into a measuring receptacle to prevent spill.

3.6.6 Remove soiled dressing and discard dressing and gloves.

3.6.7 Perform hand hygiene and reglove. Clean around drain site with sterile normal saline.

3.6.8 Remove sutures holding drain in place.

3.6.9 Use sterile gloved hand or sterile 4x4 to apply counter pressure to skin around drain site while using the other gloved hand to grasp the tubing and gently, but steadily pull the tube all the way out.

Note: *Slight resistance may be felt. If great resistance is encountered or client experiences a great deal of pain, stop and notify practitioner.*

3.6.10 Examine drainage tube tip to ensure it is intact.

3.6.11 If C&S is ordered, maintain sterility of tip, cut the end with a sterile scissors and place tip into a sterile container. Indicate on the C&S requisition where the drain was removed from and if client on any antibiotics

3.6.12 Apply dressing as required.

3.6.13 Document:

- Date, time and type of drain removed
- Suture removal
- Condition of tip
- Appearance of skin at drain site.
- Dressing applied
- Client tolerance of procedure
- Complications and interventions

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Appendix A

Types of Drains

Drain Type	Drain Classification	Picture	Removed By
Penrose	Passive Drain		RN/LPN
Jackson Pratt	Active Drain		RN/LPN
Hemovac	Active Drain		RN/LPN
T-Tube	Passive Drain		Practitioner
Malecot	Passive Drain		Practitioner
Pigtail (ex. Navarre, Nephrostomy)	Can be either Passive or Active depending on the type of collection device placed on the end.		Practitioner

Drainage Collection Devices

Bile Bag (SKU# 40260)

- Connects to a T-Tube



Foley Bag (Day or night)

- Can connect to a Malecot or pigtail drain (ex. nephrostomy tube) (SKU# 40280)



Leg Bag/Day Bag

(SKU# 40310)



Night Bag

PleurX® Drain (SKU#202629)

- Connects to a PleurX® catheter



Tru-Close® (SKU#62100)

- Can connect to a pigtail drain



Appendix B

Drains - Post Mastectomy Care**Definitions:**

Milking or stripping: a procedure used to express the contents of a duct or tube, to test for tenderness, or to obtain a specimen for study. The examiner compresses the structure with a finger and moves the finger firmly along the duct or tube to its opening (Mosby 2014).

1. Purpose

- 1.1. To maintain patency of Jackson - Pratt tubing for **post** mastectomy clients with Jackson Pratt drains **only**.
- 1.2. To ensure post-operative wound drainage.
- 1.3. To remove small clots which may obstruct J-P drainage system.

2. Policy**2.1. Milk tubing if:**

- a clot is visible in the tubing that is blocking the flow of fluid.
- fluid is leaking from the J-P insertion site.
- there is a sudden decrease in the amount of drainage.

3. Procedure**3.1. Milk the tubing**

- 3.1.1. Perform hand hygiene and don appropriate PPE.
- 3.1.2. With non-dominant hand, firmly grasp the tubing between thumb and index finger at the point closest to the insertion site.
Note: ensure tubing is stabilized and does not pull at the insertion site.
- 3.1.3. With dominant hand, gently grasp the tubing with thumb and fore finger. Keeping your finger pinched, slide your fingers down the tubing toward the bulb. Tubing should stretch as you do this.
- 3.1.4. Repeat as needed in 10 – 15 cm increments until you reach the bulb.
- 3.1.5. If you are unable to move the clot and there is no drainage in the bulb drainage, notify the surgeon.
- 3.1.6. Empty J-P bulb frequently.
Note: One study has shown that 10 mls of drainage in a 100 ml Jackson Pratt drain can decrease the suction by almost 50 mmHg therefore, drains should be emptied more frequently (Garruthers, Eismann, & Kicak, 2013, p40).
- 3.1.7. Doff PPE and perform hand hygiene.

3.2. Document (in appropriate record)

- Procedure that was performed.
- Whether the outcome of the procedure was successful or the tube remains obstructed.
- If practitioner was notified.

3.3. Report

- Notify MRP if unable to clear drain by milking tubing.

3.4. Client teaching

- Review procedure with client prior to discharge.

4. References

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