1. **PURPOSE**

   1.1 To monitor CSF drainage, promote wound healing and to minimize the risk of infection by providing a secure system.

2. **POLICY**

   2.1 **Targeted units for this policy: 6300, 3000, PICU & ICU**

   2.1.1 Care of Lumbar Drain is a Special Nursing Procedure.

   2.1.2 Registered nurses, identified by the manager in designated practice settings, will be certified in the care of lumbar drains and the CSF external drainage system.

   2.1.3 Maintain patient position and head of bed height with ordered pressure level on graduated cylinder. Patient remains on bedrest unless otherwise ordered. If patient is allowed to mobilize, the drain should be clamped off.

   2.1.4 Monitor neurological status and vital signs as ordered. Monitor drainage system q1h. Monitor temperature q4h.

   2.1.5 The physician will order the hourly volume to be drained.

   2.1.6 Maintain a sterile, closed system to prevent infection. A padded forcep and a sterile dead ender cap must be at the bedside in case tubing inadvertently disconnects.

   2.1.7 Dressing is changed only by physician.

   2.1.8 An obstructed drain is flushed only by physician.
3. **PROCEDURE**

3.1 **Supplies:**
- Padded forcep
- Sterile dead ender cap
- Sterile specimen containers
- Alcohol swabs/Betadine swabs
- Requisitions
- 6ml Syringe with needle

3.2 Observe lumbar drain insertion site for swelling, tenderness and leakage of CSF. Notify physician of any change.

3.3 Monitor the drainage system q1h for patency by observing for CSF dripping into the graduated cylinder and kinks in tubing.

*Note: Ensure stopcocks and/or clamps are open appropriately.*

3.4 If the dressing becomes soiled or wet, reinforce and notify physician.

3.5 Empty graduated cylinder q1h into drainage bag. Ensure slide clamp/stop cock is closed to drainage bag following. If drainage begins to accumulate very rapidly ie: >20 mls/hr for adults or in the absence of drainage, notify physician immediately.

3.6 Monitor volume, color and clarity of CSF. Record amount of drainage q1h.

3.7 If tubing inadvertently disconnects, clamp with a padded forcep and apply a dead ender cap. Reconnect once sterile equipment is obtained.

3.8 The drainage system must be kept at the level ordered by the physician (ie. lumbar drain insertion site). Never adjust the bed height without adjusting the drainage system. Tape controls down or utilize “lock out” function to avoid accidental change. Place sign above bed saying, “Do Not Change Head of Bed or Height of Bed”.

3.9 Send CSF specimens as ordered if patient symptomatic for C & S, protein, glucose and cells. Obtain sample from sampling port.

3.10 **Documentation:**

3.10.1 Record on the Nursing Care Plan:
- Prescribed level of graduated cylinder
- Patient position
- Patient activity
- Specimens sent

3.10.2 Record on the Nurses Progress Notes/Flow Sheet:
- Amount of CSF drainage, color and clarity of CSF
- Neurological and vital signs
- Level of graduated cylinder
- Condition of dressing
- Specimens sent
• Frequency of neurological signs and vital signs
• Frequency of dressing assessment
• When and/or if to clamp tubing
• Range of hourly CSF drainage ordered

3.11 Reporting

• Significant changes in drainage volume
• Change in neurological status
• Leakage from catheter insertion site
• Dressing soiled or wet