**Lumbar Drain Protocol – April, 2018**

PLACEMENT

Patients who are expected to have a lumbar drain placed should have recent coagulation studies and platelet counts ordered by the surgical team, so that these results can be available for the anesthesiologist before placing the drain, thus minimizing delays.

From Dr. Garmon, regarding orders to be placed by the anesthesiologist:

If you place a lumbar drain, please pull up the “Anesthesia Adult Regional Analgesia Order Set” and select 2 boxes: “IP Order: Do not administer IV heparin…” and “IP Order: Naloxone…”. The “Do not give...” order creates a hard stop against the primary team ordering anything except heparin. The “Naloxone” order is a hard stop for the epidural order set, so you cannot order anything from the epidural order set unless naloxone is selected.

Eventually, an ICU order set will be developed for lumbar drains to assist with management and to prevent accidental usage of anti-coagulants in these patients while the lumbar drain is still in. In the meantime, the above process is the best way to prevent accidental anticoagulation.

MANAGEMENT

The critical care service will oversee management of the lumbar drain. They will not be followed daily by the APMS service, nor any other anesthesiology team.

For MINOR issues with the lumbar drain (i.e., it won’t drain, issues with the dressing), the critical care service will notify ANESTHESIA

For MAJOR issues with the lumbar drain (I.e. bloody CSF or neurological changes in the patient), the critical care service will notify ANESTHESIA and consult NEUROSURGERY.

For accidental disconnections, the lumbar drain should be considered contaminated and be removed. A discussion may need to then take place as to whether it should be replaced.

REMOVAL

For ELECTIVE removal of the lumbar drain on weekdays until 5pm, the critical care service will please call the Anesthesia Hallrunner at 24-3684. Please note that the phone connected to that number can be spotty in coverage. If it isn’t answered, please call the control desk (24-2401) and ask to be connected with anesthesiology. At night and on weekends the responsible person will be the anesthesiologist on call (who seldom carry the 24-3684 number due to its inconsistent connection). Again, the control desk can help to get in touch with the Anesthesiologist if the Hallrunner phone goes unanswered.

For ELECTIVE removals, this communication is to occur before 10 A.M., in order to give sufficient time for the lumbar drain to be removed while still providing daylight hours to watch for neurological complications.

For EMERGENT removal of the lumbar drain, the numbers to call are the same as above. This can occur at any time and for a variety of reasons. Often it will be because they need to anti-coagulate the patient (i.e., for a pulmonary embolism) and the lumbar drain will need to be removed. Other times it may be that they are calling because they anticipate that the patient will need to, say, return to the OR and are expecting to heparinize the patient. If there is any concern or confusion about the path to follow due to the patient’s condition or expected course, a consultation by the anesthesiologist with the on call cardiac anesthesiologist can clarify matters.