Neuroradiology Image Guided LP/Myelograms

Guidelines for Clinicians

Preprocedure Lab Tests

For inpatients or ER: INR, PLT, PTT within 1 week of LP (or within 24 hours if on chemo with low plts)

For outpatients: INR, PLT, PTT within 3 months of LP. For patients with history of cancer, liver disease, or bleeding disorder, follow guidelines for inpatients.

For patients on anticoagulants and antiplatelet agents:

Warfarin (Coumadin): Stop 4 days prior to procedure. INR needed on day of procedure. Consultation with referring physician needed as bridging may be necessary.

IV heparin: Stop 6 hours prior to procedure. PTT needed prior to procedure. May restart 2 hours after procedure

SQ heparin: For doses less than <10K units no withholding needed. For higher doses use IV heparin guidelines

LMWH: For prophylactic doses, stop 12 hours prior to procedure. For therapeutic anticoagulation, stop 24 hours prior to procedure.

New anticoagulants (e.g., dagatran): Information evolving. Consult with faculty

ASA and NSAID’s: Continue medication as prescribed.

Clopidogrel (other than ASA): Stop 7 days prior to procedure

Ticlopidine: Stop 14 days prior to procedure

Glycoprotein IIB/IIIa inhibitors: Consult faculty
Critical Laboratory Values for Lumbar Puncture/Myelography

Plt >25,000  INR <1.5  PTT within normal range

Preprocedure Imaging

Head CT or MRI in patients with signs/symptoms of increased intracranial pressure:

New onset seizure, papilledema, focal neurologic findings, altered mental status
Guidelines for Radiology Residents

Pre-procedure assessment

1. The Neuroradiology department performs lumbar punctures and myelograms for those adult patients that require image guidance.

2. The primary responsibility for these procedures rests with the resident on the Fluoro rotation with faculty coverage by the Neuroradiology faculty assigned to procedures. The resident may recruit help from the resident on Neuroradiology or the Neuroradiology fellow.

3. Direct communication with the Radiology resident or faculty is necessary for any patient who is not being treated as part of an established protocol (e.g., intrathecal chemotherapy)

4. At the time of the request, the fellow/resident will ask the following questions:
   a. What is the indication/reason for the LP?
   b. Is the patient consentable? If not, who is the power of attorney and what is their contact information?
   c. What is the INR, PTT and PLT count?
   d. Are there any potential issues that the radiologist should know prior to performing the LP? For example, the LP needs to be performed under conscious sedation or general anesthesia.
   e. Are there any special requests? For example, measure pressures, large volume tap etc.
   f. Instruct referring physician to place the order for the LP through eDH. Make sure to also place lab orders for the CSF fluid analysis.
   g. Accepting physician should put into eDH a note detailing the above so that it will be available to the team on the day of the study.

5. For myelograms, resident or fellow will discuss the case with a Neuroradiology attending on the day of this phone conversation.
Post procedure care:

The patient should lay flat in Radiology for an hour after the procedure. Upon return to home or inpatient room, the patient should lie flat for 12 hours. No lifting or straining

Blood patch:

A blood patch may be indicated for patients who have persistent unrelenting headaches after conservative measures have been attempted

1. If patient gets a headache after getting up, recommend again lying flat for an additional 12 hours

2. Instructions for hydrations: Recommend oral hydration. Caffeine may be helpful.

3. If headaches do not improve after lying flat the patient may be offered blood patch.

4. Blood patch can be performed by Neuroradiology. Direct physician-physician discussion between the radiologist and the physician who originally ordered the LP is required prior to placement of the order in eDH.