

NAME:

MRN:

DOB:

ICU Lumbar Puncture LocSSIP

Pre-procedure Documentation

Indication: _____

Date & Time: _____

Imaging reviewed: Yes No N/A

Contraindications checked (see overleaf): Yes No

Safe to proceed? Yes No

Coagulation checked (see guidance overleaf): Yes No

INR: _____ Platelet Count: _____

Patient Consent

Does patient have mental capacity to consent to this procedure? Yes No

If Yes, inform them of potentially serious or frequently occurring complications incl. headache, backache, bleeding, infection, neurological damage

If No, consider discussion above with NOK or proceeding in patient's best interests

Above discussed with patient and verbal consent gained:

Signature: _____

Date: _____

Name (capitals): _____

Time: _____

Procedural Documentation

Aseptic Technique: Sterile gloves & gown Hat & mask Sterile drape 0.5% chlorhexidine

(tick as appropriate)

Lidocaine used: 1% 2% **Volume (ml):** _____

Position: Left lateral Sitting

Location: L2/3 L3/4 L4/5

Needle tip: Pencil point Cutting

Gauge: _____G

Number of attempts: _____

Opening pressure: _____ cm CSF

Appearance: _____

Four numbered samples sent for (tick as appropriate):

MC&S (+/- virology) – bottle 1+3 Protein – bottle 2 Glucose – grey bottle Cytology – bottle 4

Xanthochromia (light protected) – bottle 4 Oligoclonal bands – bottle 2 Other: _____

Name:

Position:

Signed:

Contraindications

- 1) Local pressure sore or infection over lumbar area
- 2) Patient refusal
- 3) Evidence of potential raised ICP with no recent head imaging, including:
 - Abnormal GCS, confusion, papilloedema, seizures
 - Focal neurological deficits
 - Bradycardia with elevated BP +/- abnormal respiratory pattern

If any signs of raised ICP then ensure CT head completed prior to LP (or imaging reviewed + reported if already obtained) to exclude SOL.

Anticoagulation guidance

Current guidance from the Association of British Neurologists¹ advocates a platelet count of ≥ 40 and INR ≤ 1.5 as generally safe for LP (note that AAGBI advocate an INR ≤ 1.4 ² for neuraxial procedures). However, if there are underlying concerns around elevated bleeding risk this should be discussed with a haematologist prior to continuing to LP.

Also refer to NBT guidance: "Guidance on assessment and management of anticoagulation for elective procedures" and "Guidelines for the perioperative management of patients taking antiplatelet agents".

The infographic below is taken from the current Association of British Neurologists guidance¹

Discontinuing medications in patients with normal renal function					
Antiplatelets	Withhold prior to LP	First dose after LP	Anticoagulants	Withhold prior to LP	First dose after LP
Aspirin low dose 75mg	Continue	No delay	Warfarin	5 Days check INR ≤ 1.4	12 Hours
Clopidogrel	7 Days consider aspirin cover	6 Hours	LMWH prophylaxis	12 Hours	4 Hours
Prasugrel	7 Days	6 Hours	LMWH treatment	24 Hours	4 Hours (24 hours if traumatic)
Ticagrelor	7 Days	6 Hours	Fondaparinux prophylaxis	36 Hours	6-12 Hours
Dipyridamole	24 Hours	6 Hours	Fondaparinux treatment	Avoid LP	Avoid LP
Tirofiban + Eptifibatide	4-8 Hours	24 Hours	Unfractionated heparin IV	4-6 Hours	1 Hour <small>Prevent others from performing LP</small>
Abciximab	48 Hours	24 Hours	Rivaroxaban + Apixaban	24 Hours	6 Hours
			Dabigatran	48 Hours	6 Hours

References

1. Dodd KC et al. *Periprocedural antithrombotic management for lumbar puncture: Association of British Neurologists clinical guideline*. Pract Neurol 2018;18:436–446
2. Association of Anaesthetists of Great Britain and Ireland, Obstetric Anaesthetists' Association and Regional Anaesthesia UK. *Regional anaesthesia and patients with abnormalities of coagulation*. Anaesthesia 2013; 68: pages 966-72