

EMERGENCY DEPARTMENT PROCEDURE NOTE: LUMBAR PUNCTURE

CPT Code: 62270

DATE / TIME:

SURGEON:

PREOPERATIVE DIAGNOSIS:

POSTOPERATIVE DIAGNOSIS:

PROCEDURE PERFORMED:

Lumbar Puncture with Cerebrospinal Fluid Examination

ANESTHESIA

_____ mL of 1% lidocaine plain

ESTIMATED BLOOD LOSS

None.

SPECIMENS

None.

COMPLICATIONS

None.

INDICATIONS FOR PROCEDURE

The patient is a []-year-old [male/female] who complains of []. The patient has [the possibility of a central nervous system infection / suspected spontaneous subarachnoid hemorrhage / known pseudotumor cerebri / unexplained seizures] for which a lumbar puncture is indicated.

DESCRIPTION OF PROCEDURE IN DETAIL

After the patient was educated regarding the indications, procedural techniques, risk versus benefit and alternatives to the procedure, informed consent was obtained. The patient was then placed in the [lateral recumbent / sitting] position with knees drawn to the chest. All persons involved were shielded with hairnets, facemasks, sterile gowns and gloves. The skin of the lower back was thoroughly sponged with chlorhexidine and allowed to dry. With sterile-gloved hands the posterior-superior iliac crests were identified at their intersection in the midline and the area was draped with a sterile disposable towel. The skin and subcutaneous tissues were anesthetized with _____ mL of 1% lidocaine. The [3.5-in, 22-ga / 2.5-in, 22-ga] spinal needle was placed into an area of skin with no suspicion of cellulitis or abscess below the [L3 / L4 / L5] spinous process angled toward the umbilicus with bevel up (*bevel lateral if seated*). The stylet was removed and [clear/turbid/xanthochromic/purulent] fluid was then seen to flow from the needle. [The manometer was then attached and the opening pressure measured at ____mm H₂O] Fluid was then collected in specimen tubes for analysis. The needle was then removed and the area covered with a sterile bandaid. The patient was instructed to remain supine and tolerated the procedure well.

Notes:

Contraindications:

Overlying skin infection / suspected abscess

Hemiparesis or signs of uncal herniation (unilateral 3rd nerve palsy with altered LOC)

Brain abscess

Relative: coagulopathy

Tubes

1 protein, glucose, cell count

2 micro and cytology

3 cell count and serologic tests for syphilis

4 Also consider CSF LDH. Bacterial and fungal meningitis will have elevated LDH.

D-dimer: positive {Lang et al., Am J Clin Pathol. 1990; 93(3):403-5}

Info for consent

post-headache 5% to 40%

minor backache 90%

traumatic tap 10% to 15%

disk herniation

infection introduced

Values

Opening pressure 70 – 180 mm H₂O; Upper limits neonate: 50 mm H₂O, infants and children: 85 mm H₂O

Normal WBC < 5 cells/ μ L

Normal RBC's <10 / μ L

Normal glucose 50 – 80 mg/dL

Normal protein 15 – 45 mg/dL