Hip Fracture Guide for Acute Pain Rotation

Handling the consult

Upon diagnosis of hip fracture, Ortho/ED calls 2PAIN pager so that patient can be evaluated for femoral/fascia iliaca catheter

- Before 5 PM: Notify regional resident to cover the consult
- After 5 PM: Acute Pain resident and Regional attending will cover the consult
    - At beginning of the night: Check Ether to see if the Main OR on call attending is Regional. If not, then see who is the Regional attending on call.
    - Call ED back and ask about/see patient to verify:
        - INR/plts/blood thinners
        - Consentability
            - If patient has significant delirium/dementia, consider whether nerve catheter will be helpful and/or at high risk of being pulled out
        - Does the patient want it/have pain
        - Confirmation of fracture (check X-ray)
        - Confirm that Ortho has seen patient and there is a plan to operate
- The acute pain service is not a formal part of the care team for these patients until the catheter has been placed. That stated, the acute pain resident is the point person to organize the catheter after 5pm.
- Use your judgement in contacting regional attending – if definitely contraindication to block, no need to contact. However, if unsure, discuss with regional attending.

Proceeding with block

Consent:

1. Determine who will consent for the procedure (patient, family member, etc)
2. Obtain written consent (form can be found with ED desk secretary), and discuss:
    a. Risks of procedure: All very rare. Discuss bleeding/hematoma, infection, nerve injury, local anesthetic toxicity
        i. Regarding nerve injury:
            1. Examine and document in procedure note any baseline numbness/weakness/neuropathy
            2. >95% cases of nerve injury resolve over time
    b. Consent the patient for femoral vs fascia iliaca nerve catheter so that both are covered
    c. Patient's vitals will be monitored during and after block placement – let the ED nurse know the block is done
    d. The Pain service will follow the patient after the catheter is placed
    e. Set expectations:
        i. The numbing medication will help with the pain, but may not completely take away the pain. If a stronger concentration of ropivacaine is used

initially, this initial bolus will wear off after 6-12hrs, and the pump will have a decreased numbing effect.

ii. The numbing medication can cause quadriceps weakness. Emphasize fall precautions.

iii. Some leakage of local anesthetic at the insertion site is normal

<u>Block logistics</u>

Supplies/Preparation (anesthesia tech can help transport equipment to ED)

- Ultrasound: Ask Regional attending if they prefer to have a Regional ultrasound machine taken down to ED, or use ED ultrasound. Place on contralateral side of patient.
- Regional anesthesia cart
- Monitors: pulse ox, BP cuff (q5min), EKG
- Check that patient has functioning IV
- Mark correct block site with the word "BLOCK"
- Kit for nerve catheters
    - Mask, cap, sterile gown, sterile gloves
    - Chloraprep (10ml)
    - Local anesthetic: 20cc ropivacaine 0.5% (confirm with attending)
    - Flexblock nerve catheter kit
        - Add using sterile technique:
            - Ultrasound probe cover
            - Tegaderms: 2 large, 1 small
            - Dermabond
            - Biopatch
            - Sterile saline flushes x2
            - +/- sterile towels depending on attending preference
- Charting: To set up Epic data collection
    - Go to Patient Lists ->Find the patient in the Emergency Department patient list
    - Double click on the patient's name ->Select "Nerve Block" under Create a New Procedure
    - Go to the Intraop section: Manually pair device to the appropriate ED monitor
    - Click the preset events at the appropriate times
- Timeout with attending: Patient name, identifier, allergies, blood thinners, neuropathy, procedure, side

After the block

- Bolus catheter with local anesthetic, per attending preference
- Make sure ED RN gets signout
- Charting
    - Click all preset Events
    - Document staff, medications, procedure note
    - Select "Pain" button and "Yes" for Pain Consult

- Order Nimbus infusion: Nimubs order set: Ropivicaine 0.2% at 5ml/hr, demand bolus 5ml q30min

<u>Femoral vs Fascial iliaca nerve block</u>

Femoral nerve block

- Covers anterior thigh, most of femur and knee joint, skin along medial aspect of lower leg
- More superficial: compressible, which is preferable with coagulopathy

Fascia iliaca block

- Similar location as femoral nerve block, but this is a fascial plane block, with goal of local anesthetic spread under the fascia iliaca more proximally than with femoral nerve block: femoral nerve coverage, plus potentially covering lateral femoral cutaneous nerve and lumbosacral plexus (more theoretical)
- Deeper block (plane extends retroperitoneal), so less favorable with coagulopathy

<u>Ultrasound imaging/technique (from Regional Handbook)</u>

Place the probe in the inguinal crease and identify the femoral artery. The femoral nerve will be lateral to the artery. At the inguinal crease, the nerve is covered by the fascia iliaca and separated from the artery and vein by the psoas muscle and the ligamentum ileopectineum. Make sure that you are above the femoral artery bifurcation. The femoral nerve is in the hyperechoic triangle.