

## Paraspinal pain catheter placement

OR Pharmacy: 83558

Supplies:

1. On-Q pain buster (the actual pain ball filled by pharmacy – this will be hand delivered to the room). The maximum bupivacaine infusion percutaneously is **5.5 mg/kg per day**.
  - a. For patients with unilateral rib fractures use 1x 400cc bulb with filled with 0.5% bupivacaine at the maximum allowable rate (typically 2cc/hr). For patients with bilateral rib fractures use 2x 400cc pain busters with 0.5% bupivacaine at the maximum allowable rate (typically 1cc/hr). This will mean you need 2x On-Q pain catheter kits.
  - b. In patients with who weigh less than 70kg order 0.25% bupivacaine in the pain buster(s) in order to stay below the maximum daily bupivacaine dosage with a maximized rate of 2-3cc/hr. Check with the OR pharmacist to verify maximum allowable rate in your patient.
    - i. Included in the kit will be a 10cc syringe with 0.5% bupivacaine for priming catheter
2. On-Q pain catheter kit (you will need to get this kit from the OR pharmacy)
  - a. Catheter (in black plastic bag)
  - b. 3x Steri-strips
  - c. Introducer needle/catheter assembly
  - d. Luer lock
3. Sterile Gloves
4. 2x Chloraprep
5. 11 blade
6. Tegaderm x2
7. Sterile drape or gown
8. 1% lidocaine for infiltration
9. 3cc syringe
10. 20 gauge needle

Procedure:

1. Obtain consent for the procedure: risks include bleeding , infection, pain, damage to underlying structures, failure of pump to achieve pain control and accidental injection into a vessel.
2. Place patient on side and prep the back on the side to be blocked.
3. Use the included introducer assembly to gauge where the tip of the catheter will terminate. Coverage will typically extend to T3.
4. Palpate the paraspinal muscles on the involved side and find the nearest rib lateral to the paraspinal muscle.

5. Draw up lidocaine for infiltration and use the same needle to ensure that the introducer will be placed directly over a rib (use the injection site to push straight down until the needle tip contacts rib).
6. Use the 11 blade to make a small 1cm incision at the injection site.
7. Place the introducer assembly (needle + white catheter) in the incision directly over the underlying rib.
8. Palpate the tip of the introducer catheter as it is advanced percutaneously aiming cephalad .
9. Hub the assembly at the level of the skin.
10. Remove the needle from the introducer assembly – the white catheter will be left in place.
11. Thread the catheter through the end of the introducer assembly to the first solid rectangular marking. At this level all of the fenestrations will be within the percutaneous space.
12. If there is resistance withdraw catheter. Replace the needle and withdraw from the the level of the skin. Palpate the skin as the assembly is readjusted.
13. Two people will be required to secure the catheter in place and peel away the white catheter portion of the introducer assembly. The catheter should now be in place at the level of the 1<sup>st</sup> solid rectangle or beyond.
14. 2x steristrips over the insertion site. Loop the remaining catheter and direct the tail (with the luer) anteriorly for ease of use. Place 1x steristrip over the loop of catheter such that pulling on the catheter does not remove it at the level of the skin.
15. 2x Tegaderms over the insertion site + adjacent loop of catheter.
16. Inject 5cc (0.5%) bupivacaine to prime the catheter. There should not be any resistance at this point.
17. Luer lock the catheter or if pain buster pump is available in the room – secure to the end of the catheter.
18. Set the dial on the On-Q pump to the desired hourly rate (even numbers only).
19. Write procedure note.