SERRATUS ANTERIOR PLANE BLOCK PROJECT

**What is the Serratus block?**
Ultrasound-guided plane block for pain control of anterior/lateral rib fractures 2-9.

**How is it done?**
The Serratus block is very similar to the Fascia Iliaca Compartment Block.
Use ultrasound to guide an 18G needle in an in-plane approach to the muscle plane just above the serratus muscle (the muscle plane just superficial to the rib) at the 4th intercostal space at the mid-axillary line. Inject 20mL of 0.5% bupivacaine + 10mL normal saline into this plane.

![Image of Serratus Block Procedure](image)

**Step-by-step primer on the Serratus Block:** [https://www.youtube.com/watch?v=GhnQUytuxcA](https://www.youtube.com/watch?v=GhnQUytuxcA)


**What is the Serratus Project?**
We are studying the effectiveness of this block in the MMC ED.

**Inclusion Criteria:**
- > 18 years
- > 2 unilateral fractures of anterior or lateral ribs 2-9
- Being admitted to the Trauma Service

**Exclusion Criteria:** In general, patients are excluded for inability to consent to the study or accurately report pain levels.
- Intubated, ICH, Traumatic Brain Injury, Delirium/Dementia, Clinical Intoxication.
- Significant Distracting Injury – including long bone fracture, visceral injury requiring surgical management, significant soft tissue injury.
- Chest tube in place or anticipated to be placed.
  - Pneumothorax is NOT an exclusion criteria, unless a chest tube placed.
- Going to OR emergently.
- Allergy to lidocaine/bupivacaine.
- Weight < 50 kg
  - To allow standard dosing of bupivacaine, the administered dose is safe for patients > 50 kg.
My patient is eligible and interested in the block. How do I enroll them in the Serratus study?

Call REMIS (662-2950) and ask to have the Serratus Study Team paged. You will need to give the patient’s name, room, and a call back number. This will send a page to the following people who have been trained to enroll patients:

- Randy Kring 741-0442
- Andrew Fried 741-9378
- Chris Allison 767-8617
- Chris Hasslinger 741-0387
- Evan Gill 741-3458
- Sam Potter 741-9284
- Annie Huyler 767-6939
- Anne Runkle 741-9237
- Liz Hamilton 767-8457

If any of these providers are available, they will call you back to discuss the case. If you don’t hear back within an hour of the page going out, there is likely no one available to enroll.

The serratus block can be performed outside of study enrollment by adequately trained ED providers on patients as deemed clinically appropriate.