

Posterior Approach Suprascapular Nerve Catheter for a Polytrauma Patient with Pneumothorax

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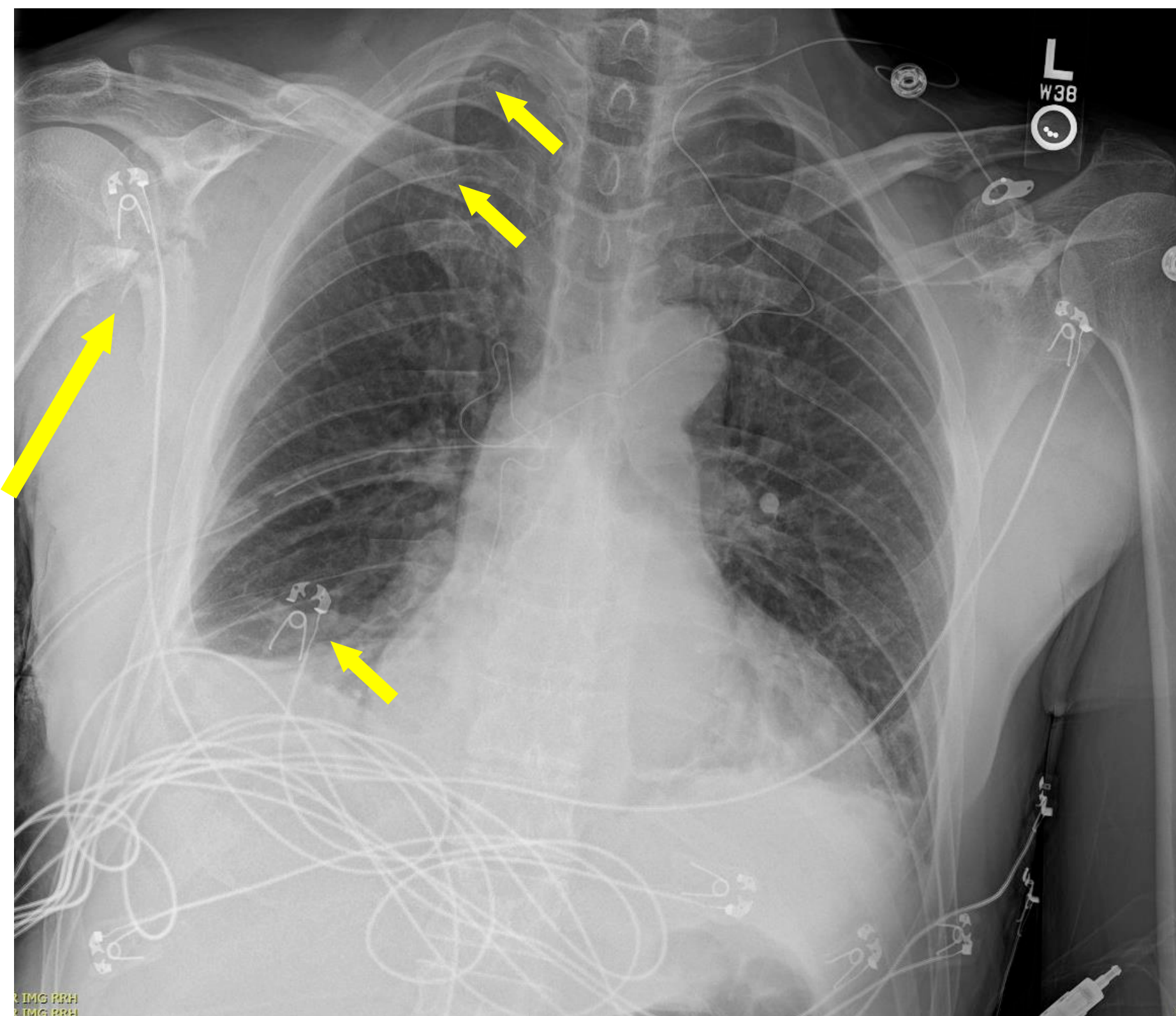
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Introduction

- Regional anesthesia provides site-specific pain relief while avoiding opioid-related side effects, which allows patients to mobilize earlier, avoid respiratory complications, and remain hemodynamically stable.¹
- Literature on suprascapular nerve block for scapular fractures are limited despite multiple approaches.^{2,3}
- We describe the utility of a posterior approach to the placement of a suprascapular catheter in addition to an erector spinae plane block for acute pain management in a patient with multiple traumatic upper body fractures.

Patient Presentation

- 61-year-old male history of hypertension presented to the ER after high-speed bicycle accident.
- Patient found to have right scapular fracture, right pneumothorax, right rib fractures (ribs 1, 3-9), and right hepatic laceration.



Clinical Course

- Patient started on multimodal pain regimen including acetaminophen, methocarbamol, gabapentin, lidocaine patches, and patient controlled intravenous analgesia (PCA) with hydromorphone.
- An erector spinae catheter was placed on hospital day 1 for management of rib fracture pain.

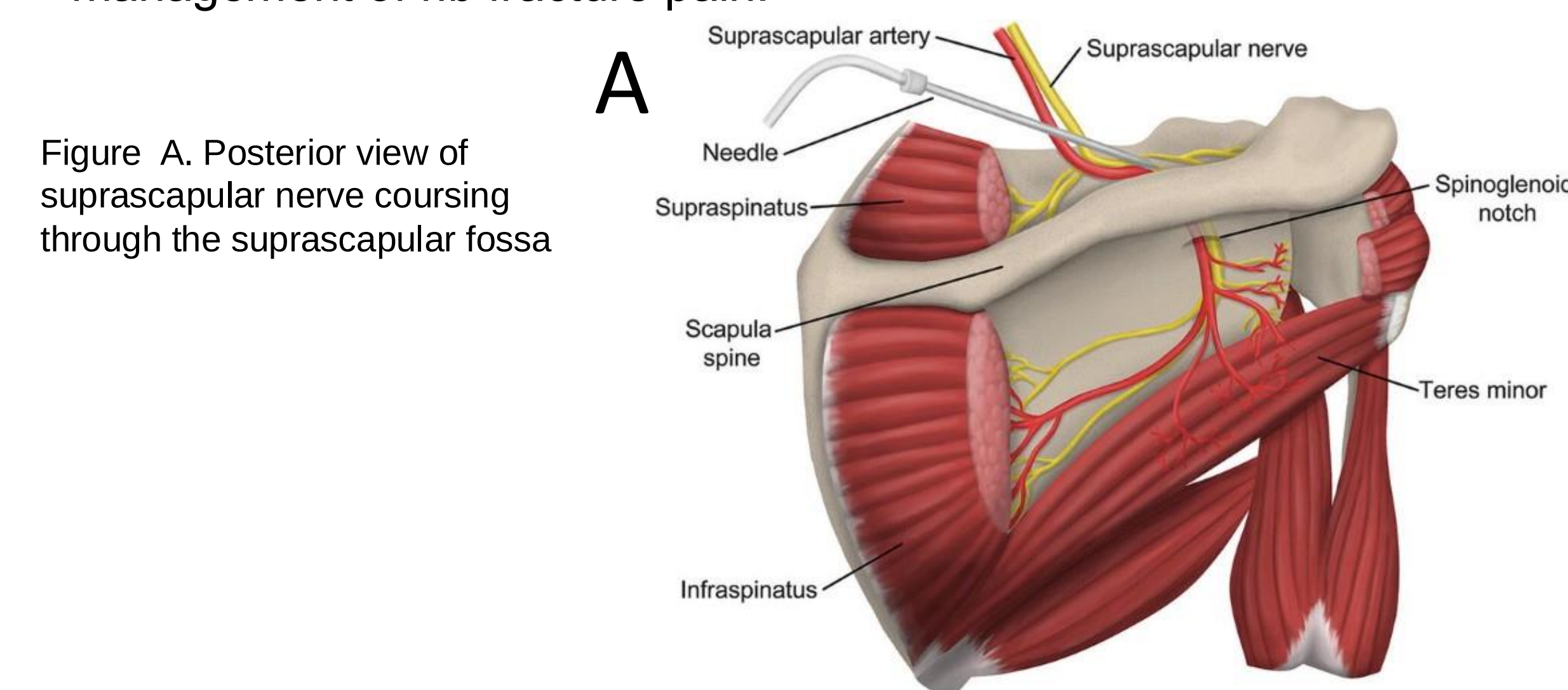


Figure A. Posterior view of suprascapular nerve coursing through the suprascapular fossa

- Patient endorsed improvement of pain with multimodal agents for his chest, but he was unable to sleep or lay on his back due to pain from his right scapular fracture.
- A posterior approach right suprascapular catheter was placed on hospital day 2 with significantly improved pain control, which allowed patient to sleep for the first time during hospitalization.

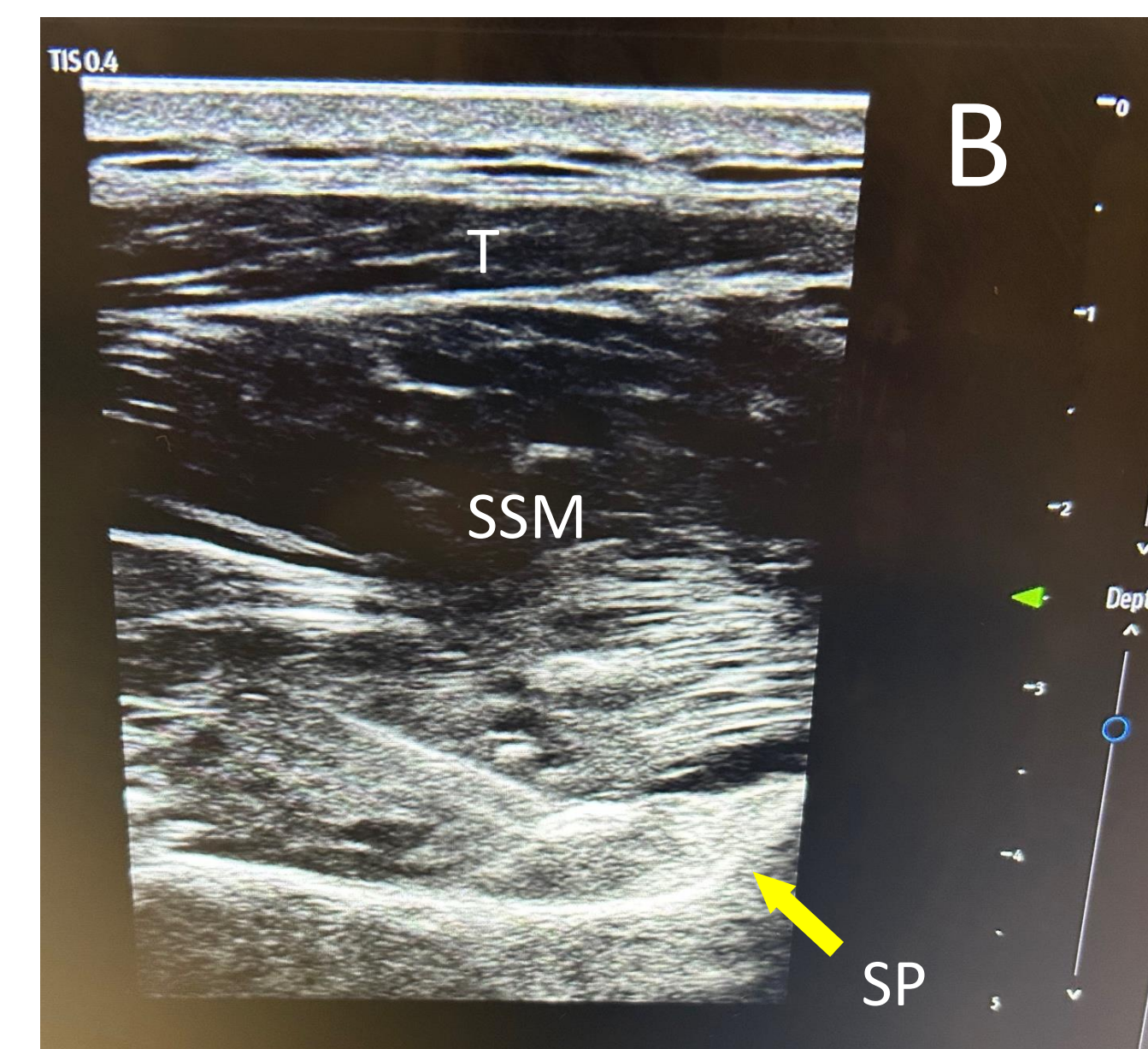


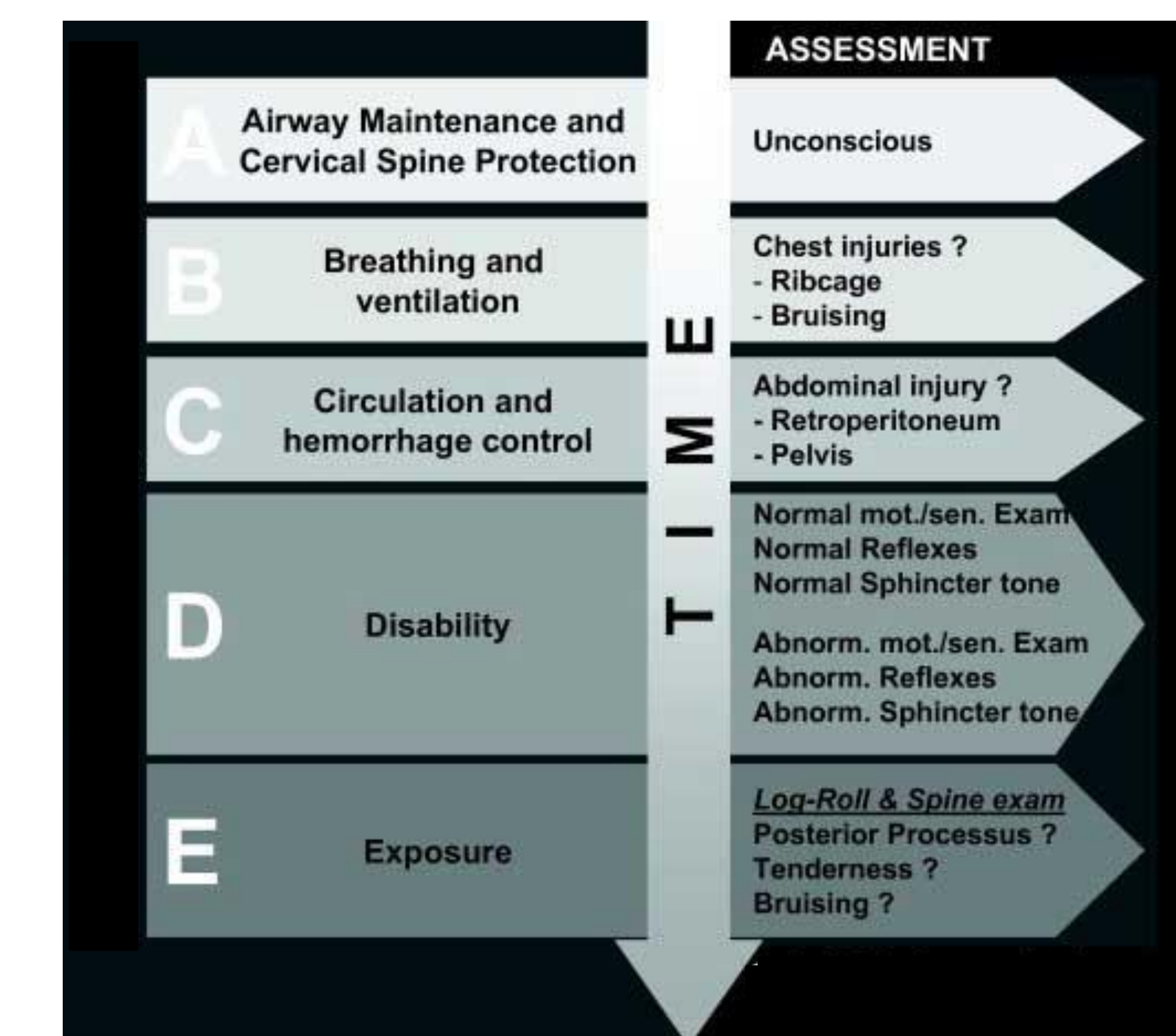
Figure B. Sonogram of catheter suprascapular nerve block with catheter placement from the posterior approach

T = Trapezius
SSM = Supraspinatus muscle
SP = Scapular spine

- Remaining hospital course was uncomplicated and patient was discharged home with two ON-Q pumps infusing both erector spinae and suprascapular catheters for 7 days.

Discussion

- Suprascapular nerve catheter placement is a safe and effective analgesic approach for scapular fractures.
- Familiarity with multiple approaches to performing blocks is valuable in trauma patients.



- In this specific case, we favor a posterior approach to the suprascapular nerve catheter over an interscalene catheter because it avoids possibility of iatrogenic phrenic nerve palsy in a patient with ipsilateral hemopneumothorax.
- Further investigation is warranted to elucidate potential benefits of utilizing regional anesthesia in trauma, including reduction in opioid consumption and decreased length of hospital stay.

References

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