

Regional Anesthesia Catheters and Infection Rates: An Institutional Review

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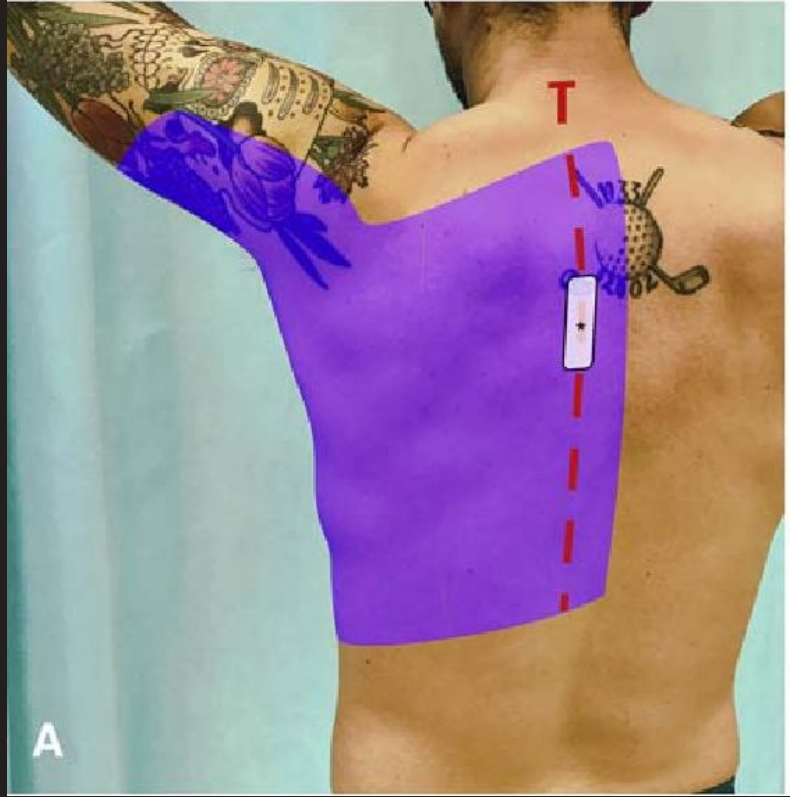
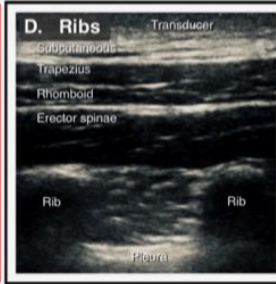
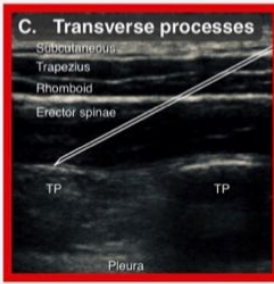
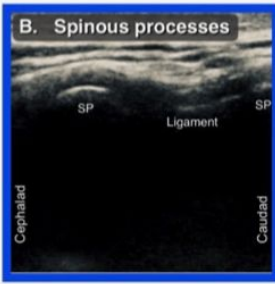
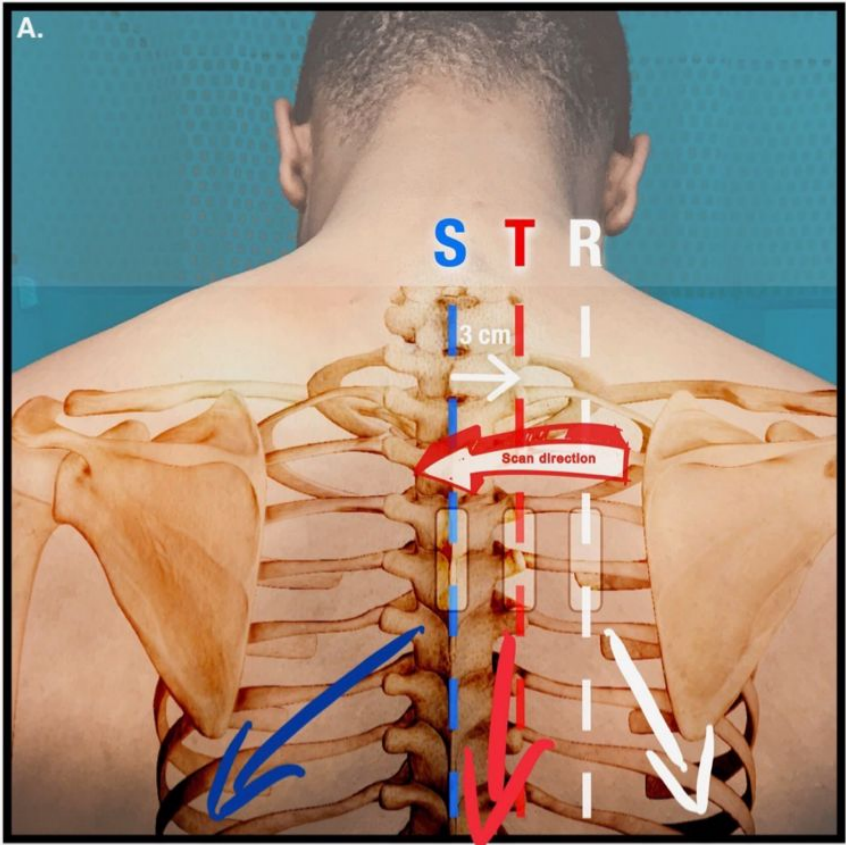


Background:

- Regional anesthesia is a relatively newer field
 - Expanding beyond perioperative patient
- Great uses in trauma¹
 - Now required by the American College of Surgeons for Level 1 Certification²
- Non-anesthesia providers now performing blocks/catheters
- Uses:
 - Rib fractures, hip fractures, etc
 - Procedural anesthesia
- Blocks: 6-12 hours of relief
- Catheters: days+

1. Gadsden J, Warlick A: Regional anesthesia for the trauma patient: improving patient outcomes. Local Reg Anesth. 2015;August 12;8:45-55.

2. Mohanty S, Rosenthal RA, Russell MM, et al.: Optimal Perioperative Management of the Geriatric Patient: A Best Practices Guideline from the American College of Surgeons NSQIP and the American Geriatrics Society. J Am Coll Surg. 2016;May;222(5):930.



Courtesy of: highlandultrasound.com

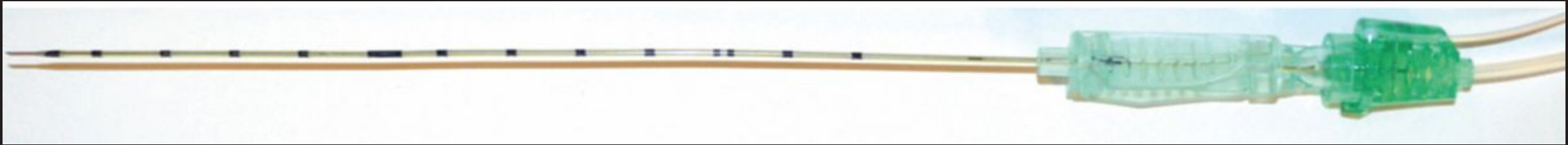
Aim Statement:

- To examine the incidence of infection for regional anesthesia catheters at Hennepin Healthcare Emergency Medicine Acute Pain Service



Methods:

- Emergency Medicine Acute Pain Service
- Retrospective chart review
 - Evidence of infection/sepsis with suspected source being catheter
- Part of routine QA/QI



Findings:

- Years: 2017 - 2021
- Patients with catheters: 496
- Infections identified: 1
 - Catheter is thought to be source
- Incidence of infection: 0.2%

Discussion:

- Infection rate quite low (0.2%)
- Patient discharged home with Erector Spinae Plane (ESP) catheter in place
 - Fell out, a patient replaced themselves using non-sterile technique
 - Localized infection noted on re-check
 - Catheter removed, treated with antibiotics

Conclusion:

- Regional anesthesia catheters and blocks are safe, effective procedures for pain control in perioperative or trauma settings or for procedural anesthesia
- Advantages:
 - Reduces use of high-risk opioid medications
 - May be an alternative to conscious sedation in select patients (e.g. interscalene block for shoulder reduction)
- Disadvantages:
 - Indwelling catheters carry the risk of infection, though small
 - Must be diligent in patient selection, especially for discharge home

Questions

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