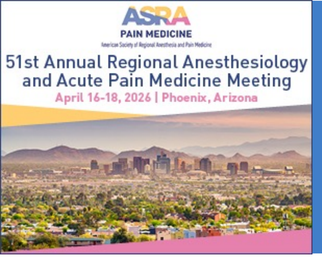

Regional Anesthesia Strategies for Recurrent Cryoablation of Shoulder Fibromatosis

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Introduction

- Desmoid type fibromatosis can cause significant pain due to neurovascular compression and space-occupying effects
- Cryoablation is an effective treatment for extra-abdominal fibromatosis.
- However, post-cryoablation pain can present challenges, with no standardized analgesic strategy.

- *Case: interscalene brachial plexus blockade (ISB) to manage chronic and post-procedural pain following recurrent cryoablation procedures for shoulder fibromatosis.*

Methods

Interscalene Brachial Plexus Block (ISB)
- Brachial plexus from supraclavicular fossa, and corresponding cervical nerve roots were identified
- 21-gauge needle advanced in-plane to the target site, followed by injection of 10 ml of 1.3% liposomal bupivacaine and 10 ml of 0.25% bupivacaine.

Pectoserratus Fascial Plane Block
- For additional chest wall and axillary coverage
- Anterolateral chest wall, injection below pectoralis minor over the corresponding rib
- 20 ml of 0.25% bupivacaine administered

Case Report

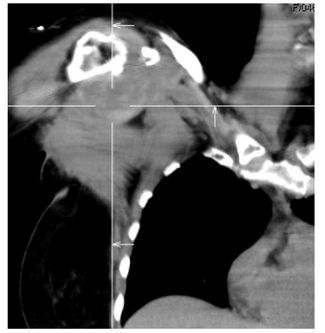
Patient: 46-year-old woman with right shoulder desmoid fibromatosis s/p failed systemic therapy and prior surgical resection
- Undergoing serial CT-guided cryoablation for tumor control and pain palliation
- Progressive shoulder pain radiating to the axilla and lateral chest, limiting daily function.

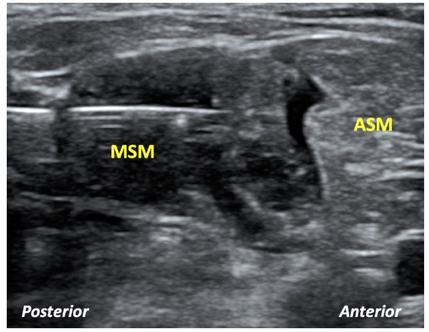
Intervention: CT-guided cryoablation targeting tumor involvement of the anterior joint capsule, chest wall, and brachial plexus followed by regional anesthesia with interscalene block (ISB) and pectoserratus block for postoperative analgesia.

Outcome: Significant pain relief over 48 hours, reduced inpatient opioid requirements compared to baseline (Oxycodone 15 mg PRN at home)
- Maintained multimodal regimen of acetaminophen, ketorolac, gabapentin and PRN methocarbamol
- Discharge on PRN oxycodone, pain score 2/10

Subsequent Course: The patient underwent two additional cryoablations with a similar regional anesthesia strategy applied to each clinical scenario
- Progressive tumor involvement led to increased axillary pain and brachial plexus neuropathy over time, requiring hydromorphone PCA for breakthrough pain despite regional blockade.

Clinical Images





Discussion

- Desmoid type fibromatosis often requires escalating opioid regimens for management of pain symptoms.
- Serial cryoablation treatments are an effective treatment modality, but can contribute to additional pain symptoms.

Our case demonstrates the benefit of incorporating regional anesthesia to facilitate post-cryoablation and tumor related pain in the non-OR setting.

Abstract & References