Post-Operative Pain: New Tricks That Make a Difference

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Post-Mastectomy Pain Syndrome

• Pathophysiology: poorly defined ...
  – Variation in onset/duration
  – Variation in presentation
  – PMPS encompasses multiple pain processes
    • Intercostal brachial nerve
    • Sensory nerves

...therefore it is difficult to treat

Post-Mastectomy Pain Syndrome

• Definition: Chronic pain
  – Persists after the normal surgical healing time
• Incidence: 30-70%
• Onset: Varies
• Duration: Varies
• Cause: “Unknown”
• Presentation: Pain in axilla, arm, chest wall
  – Inability to wear a bra or sleep on affected side

Dermatomes

“I cannot wear a bra”
“I cannot sleep on my side”
“It hurts in this area”

Correlates to the infra-mammary fold
Intercostal Nerves

- Arise from the anterior divisions of the thoracic spinal nerves
- Anterior and Lateral Cutaneous Branches

Post-mastectomy Pain Syndrome

- Hypothesis: neurogenic pain due to damage to the cutaneous branches of T4/T5 sensory nerves as they exit the chest wall
  - Cauterized in conjunction with the accompanying vessels during dissection of the breast tissue

Trigger Point Injection

- Trigger points correlate with the egress of the T4/T5 cutaneous branches
  - Infra-mammary fold at 6:00 and 3:00/9:00
- Perineural infiltration of 2 mL mixture of equal parts 0.5% bupivacaine and 4 mg/mL dexamethasone

Our Experience

Pain resolved in 88.9% of sites treated with trigger point injections

Since 2011: 54 sites treated (35 patients) 65 injections (59/65) with 90% technically successful
Summary

- PMPS is common
- Ask your patients if they have pain
  - Inability to sleep on affected side
  - Inability to wear a bra
- Focused examination for trigger points
- [www.ucsfbreastcarecenter.org](http://www.ucsfbreastcarecenter.org)