



Combined Erector Spinae, Interscalene, & Supraclavicular Nerve Blocks for Scapular Spine Surgery

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Intro:

- Scapular spine fracture (Fx) is a rare complication of reverse total shoulder arthroplasty (rTSA)
- Scapular spine pain difficult to treat due to complex innervation (C3-T5)
- Identify-select-combine approach used to target multifactorial pain

Materials/Methods:

- Informed consent obtained
- Case report exempt from IRB review

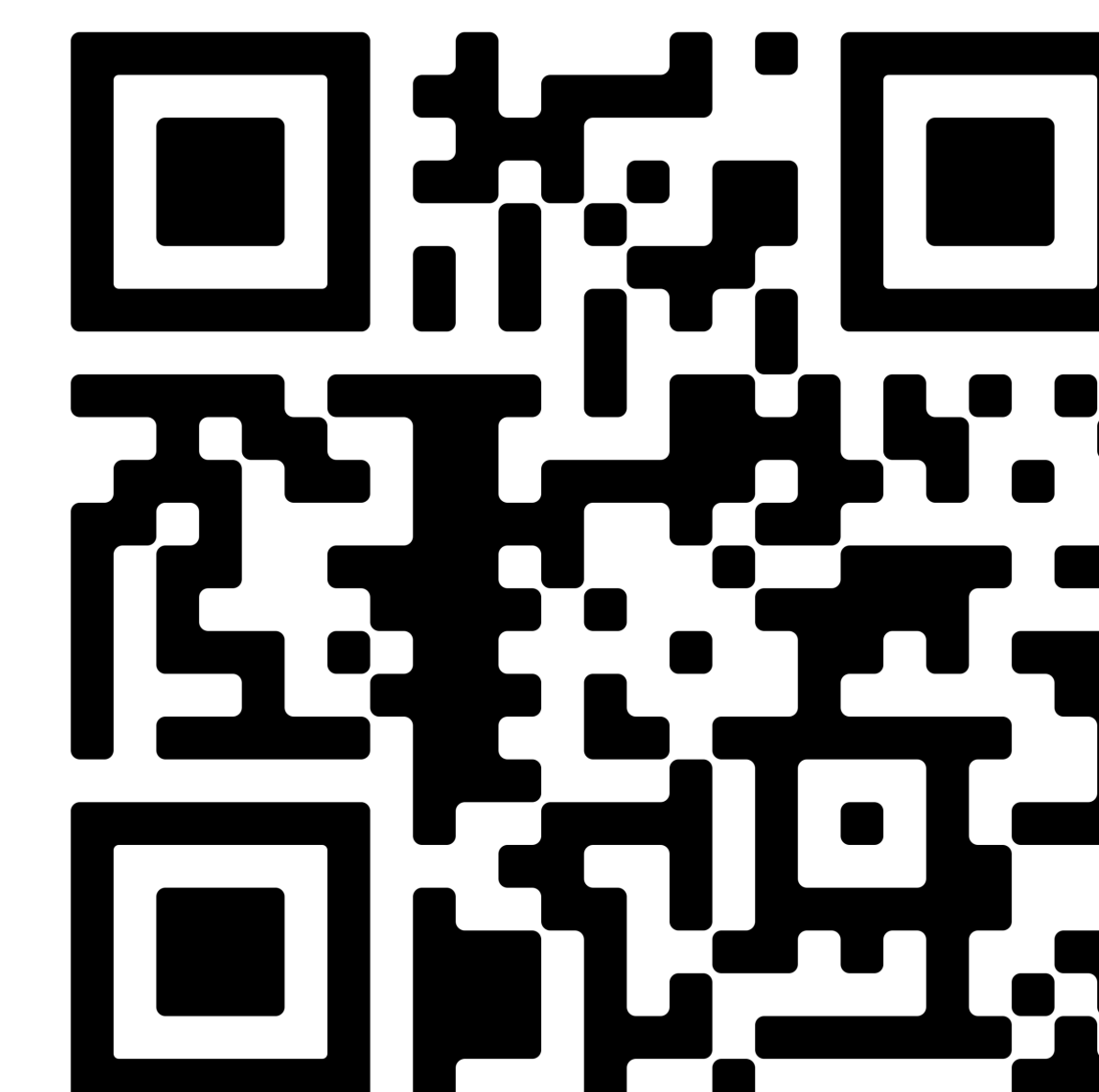
Results/Case Report:

- 65 yo M with R scapular spine Fx after rTSA presented for ORIF
- Pre-op interscalene (5 ml), supraclavicular nerve (5 ml), and ipsilateral T3 erector spinae plane block (15 ml)
- GETA for ORIF
- Low reported pain scores for 12 hours post-op, limited opioid use

Discussion:

- Despite complex innervation scapular spine pain can be managed with regional techniques
- Targeting brachial plexus and thoracic dorsal rami in combination effectively covers scapular spine

Acute **post-operative pain** for **scapular spine surgery** was successfully managed with a combination of nerve blocks: a **low interscalene**, **supraclavicular nerve**, and ipsilateral **T3 erector spinae plane block**.



Link to Abstract

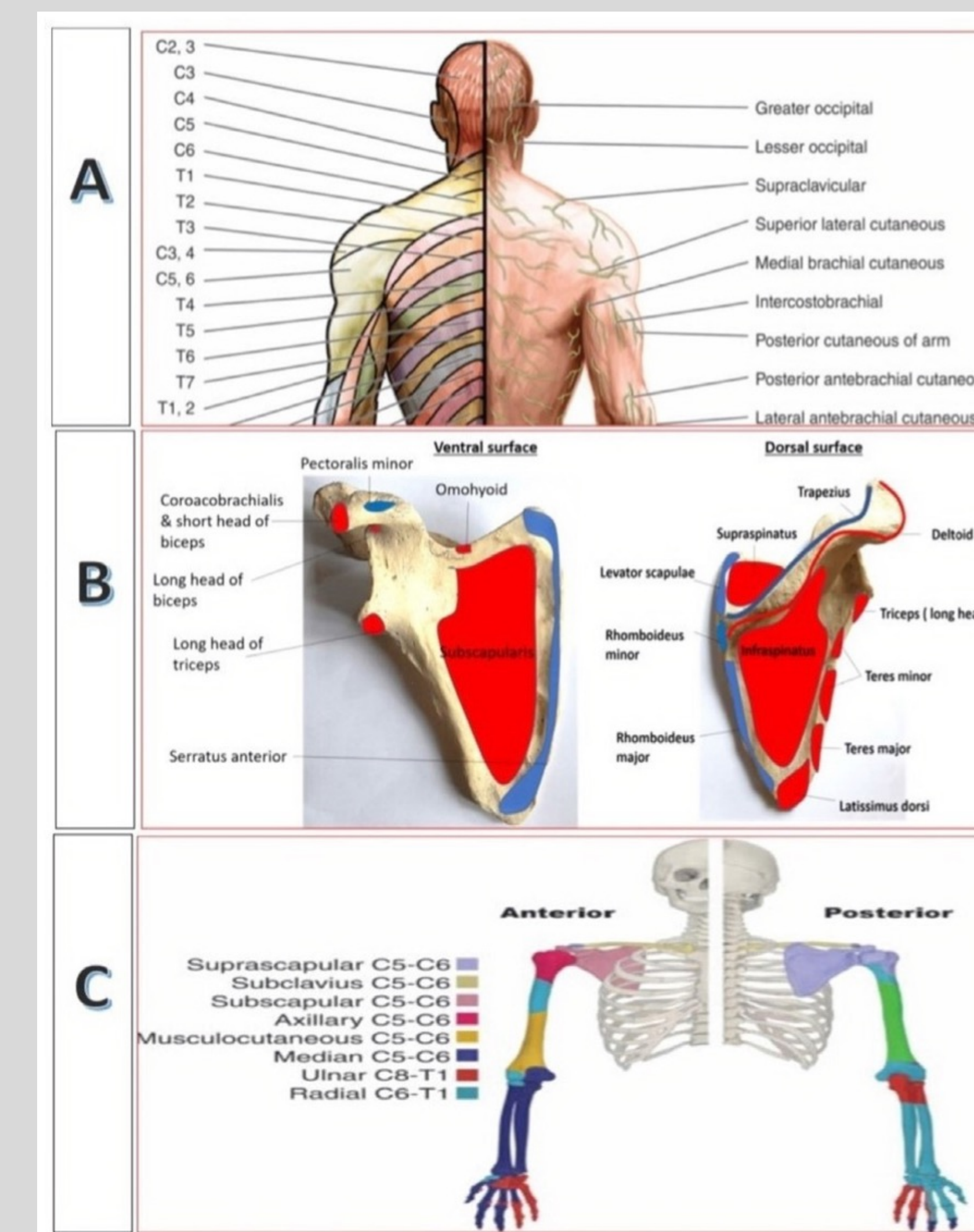


Table 2 Procedure-specific target innervations		
Surgical steps	Structures involved	Target innervations
1. Incision	Skin from the tip of the acromion to the tip of the scapula	Supraclavicular nerve (C3–C4) Superior lateral cutaneous nerve (C5–C6) Dorsal rami T1–T5
2. Superficial dissection	Deltoid muscle Teres minor muscle Infraspinatus muscle	Axillary nerve (C5–C6) Suprascapular nerve (C5–C6)
3. Deep dissection	Posterior glenoid capsule	Axillary nerve (C5–C6) Suprascapular nerve (C5–C6)
4. Joint access	Glenohumeral joint	Axillary nerve (C5–C6) Suprascapular nerve (C5–C6) Subcapsular nerve (C5–C6) Lateral pectoral nerve (C5–C7) Musculocutaneous nerve (C5–C7)
5. Reduction and plating	Dorsal scapular surface Ventral scapular surface	Suprascapular nerve (C5–C6) Subcapsular nerve (C5–C6)