

## References

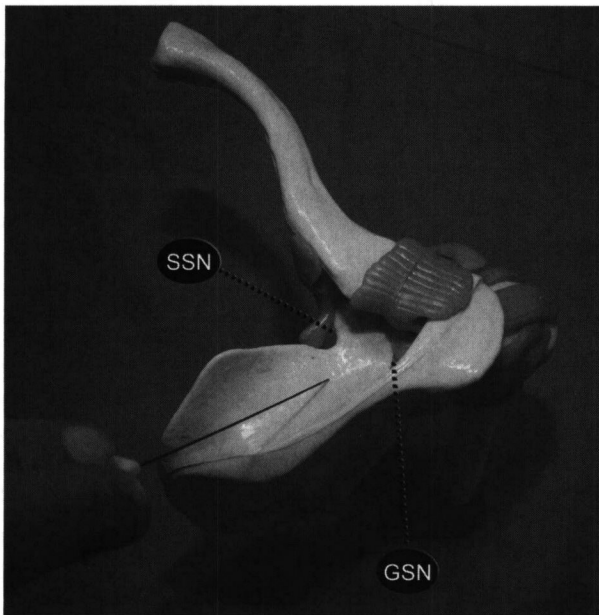
1. Saberski L. Rediscovery of ganglion impar block via coccygeal joints. *Reg Anesth Pain Med* 2007;32:539.
2. Foye PM, Buttaci CJ, Stitik TP, Yonclas PP. Successful injection for coccyx pain. *Am J Phys Med Rehabil* 2006;85:783-784.
3. Foye PM. New approaches to ganglion impar blocks via coccygeal joints. *Reg Anesth Pain Med* 2007;32:269.
4. Oh CS, Chung IH, Ji HJ, Yoon DM. Clinical implications of topographic anatomy on the ganglion impar. *Anesthesiology* 2004;101:249-250.
5. Postacchini F, Massobrio M. Idiopathic coccygodynia. Analysis of fifty-one operative cases and a radiographic study of the normal coccyx. *J Bone Joint Surg Am* 1983;65:1116-1124.

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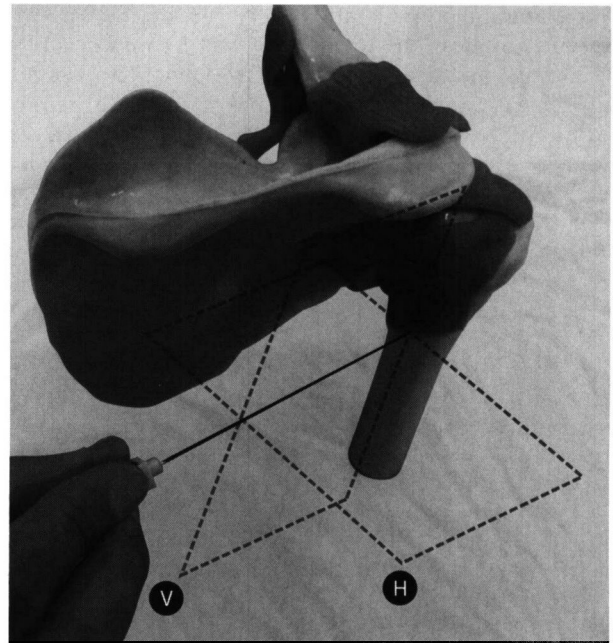
### Axillary (Circumflex) Nerve Block Used in Association With Suprascapular Nerve Block for the Control of Pain Following Total Shoulder Joint Replacement

#### To the Editor:

A 36-year-old female (36 kg) with severe juvenile rheumatoid arthritis presented for right total shoulder joint replacement. She also had spina bifida with an associated ventriculo-peritoneal (VP) shunt coursing along the right side of the neck. She had severe kyphoscoliosis of her spine, and severe restrictive lung disease. She had known difficult intubation. Significant contraindications to the use of an interscalene block (ISB) included the VP shunt perhaps distorting the anatomy of



**Fig 1.** The suprascapular nerve block of Meier. Superior view of insulated needle in the suprascapular fossa. The suprascapular nerve enters the groove at the suprascapular notch (SSN) and winds laterally around the greater scapular notch (GSN).



**Fig 2.** The axillary nerve block of Price. The horizontal plane (H) is at the level where the axillary nerve passes across to the posterior surface of the humerus. The vertical plane (V) extends from the lateral aspect of the acromion. The axis line at which (V) intercepts (H) allows location of the axillary nerve.

the interscalene groove, as well as being vulnerable to needle puncture. Diaphragmatic paresis could significantly compromise the patient's ventilatory capacity postoperatively.

These complications would both be avoided using selective blockade of the axillary and suprascapular nerves as an alternative technique. The patient was in beach chair position, the shoulder joint in adduction. The suprascapular nerve was blocked using the technique of Meier,<sup>1,2</sup> with 10 mL of 0.75% ropivacaine containing 5 mcg/mL adrenaline injected in 5 mL increments onto the bone of the lateral aspect of the suprascapular groove (Fig 1). The axillary nerve was blocked using the technique of Price,<sup>1</sup> as it passes across the posterior aspect of the neck of the humerus (Fig 2). Twitches involving the anterior deltoid were located at a depth of 6 cm; 10 mL of 0.75% ropivacaine plus 5 mcg/mL adrenaline was then injected in 5 mL increments. Sixty minutes following placement of the nerve blocks the patient reported having no pain in her right shoulder. She had an area of cutaneous numbness over her deltoid consistent with axillary nerve blockade. She first noticed pain in her shoulder 26 hours after the nerve blocks were inserted.

ISB is considered the gold standard for analgesia following major shoulder surgery,<sup>3</sup> but it is associated with a range of minor and major side effects and complications which may result in the technique being contraindicated in certain clinical scenarios.<sup>4</sup> While complications occur rarely, they may be more likely if a VP shunt distorts the local anatomy.

Ipsilateral diaphragmatic paresis is considered a universal complication of the ISB<sup>4,5</sup> and could severely embarrass our patient's ability to adequately inhale, possibly to the point of respiratory failure. The attraction of the combined suprascapular nerve and axillary nerve technique, which I have termed the "shoulder block," is the ability to selectively block the 2 primary nerves supplying the shoulder joint and surrounding structures, avoiding needle insertion in the region of the VP shunt, while also preserving diaphragm function.<sup>1</sup>

I have performed more than 100 shoulder blocks over 2 years, with very encouraging results with regard to the adequacy of analgesia. I use them primarily for minor subacromial and intra-articular arthroscopic procedures, and for more major procedures such as rotator cuff repair if ISB is likely to be poorly tolerated. Patient satisfaction has been high due to both adequacy of analgesia and avoidance of side effects and complications associated with ISB.<sup>1</sup> I routinely perform the blocks prior to induction, under light sedation, with the patient seated and the arm adducted.<sup>1</sup> I am currently working toward a randomized controlled trial comparing interscalene block with shoulder block, and examining adequacy of analgesia, side effects, complications, and patient satisfaction.

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#### References

1. Price DJ. The shoulder block: A new alternative to interscalene brachial plexus blockade for the control of postoperative shoulder pain. *Anaesth Intensive Care* 2007;35:575-581.
2. Meier G, Buettner J. Suprascapular nerve block. In: Meier G, Buettner J, eds. *Peripheral Regional Anesthesia: An Atlas of Anatomy and Techniques*. Stuttgart: Thieme; 2006:48-54.
3. Singelyn FJ, Lhotel L, Fabre B. Pain relief after arthroscopic shoulder surgery: A comparison of intraarticular analgesia, suprascapular nerve block, and interscalene brachial plexus block. *Anesth Analg* 2004;99:589-592, table of contents.
4. Borgeat A, Blumenthal S. Interscalene brachial plexus block. In: Hadzic A, ed. *Textbook of Regional Anesthesia and Acute Pain Management*. New York: McGraw-Hill; 2007:414-416.
5. Urmey WF, Gloeggler PJ. Pulmonary function changes during interscalene brachial plexus block: Effects of decreasing local anaesthetic injection volume. *Reg Anesth* 1993;18:244-249.

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#### Ultrasound and Regional Anesthesia Technique: Are There Really Ultrasound Guidance Technical Limits in Sciatic Nerve Blocks?

##### To the Editor:

We read with interest the case report<sup>1</sup> in which Saranteas et al. described the case of an elderly patient

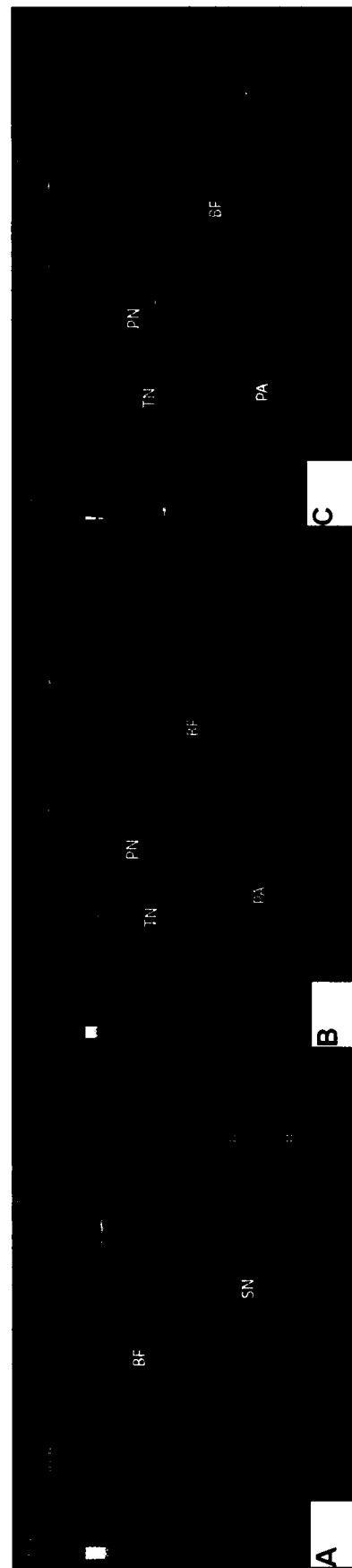


Fig 1. (A) Visualization of sciatic nerve before its division. (B) Cross-sectional imaging of the popliteal fossa showing the tibial nerve, peroneal nerve, popliteal artery, and biceps femoris. (C) Color flow Doppler demonstrates the blood flow inside the artery. BF, biceps femoris; PA, popliteal artery; PN, peroneal nerve; SN, sciatic nerve; TN, tibial nerve.