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The novel Diagonal Suprascapular Canal block: a simple selective and safe Anterior Suprascapular nerve block

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Response to “Comment on The novel Diagonal Suprascapular Canal block for shoulder surgery analgesia: a comprehensive technical report

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Response to The novel Diagonal Suprascapular Canal block for shoulder surgery analgesia: a comprehensive technical report

Letter to the Editor

Dear Editor:

The Diagonal Suprascapular Canal (DiSC) block has been described as a novel individualized anterior suprascapular nerve (SSN) block [1]. This tailored block is performed from a completely novel anterior entry point in the supine position. It is a step-forward block that allows the SSN to be blocked proximally at the level of the suprascapular notch, at the emergence of the medial and lateral trunk (midpoint of the suprascapular canal [SSC]), or even laterally at the level of the spinoglenoid notch. Anatomical variations in the divisions of the SSN should be considered whenever the block is performed distally (laterally (distally)) in the SSC. However, in most cases, the target of the DiSC block in the perioperative setting is the entry of the SSC. The block may also be administered at the SSC midpoint (or laterally/posteriorly) in specific cases such as isolated infraspinatus tendon rupture or infraspinatus fracture [1].

Siegenthaler et al. [2] evaluated the spread of local anesthetics after performing a supraclavicular SSN block using a sub-omohyoid approach. To the best of my knowledge, this is the only study of local anesthetic spread using the sub-omohyoid SSN block. The authors concluded that as the proximity of the SSN to both the brachial plexus in the sub-omohyoid region and to the pleura need to be critically considered, the sub-omohyoid approach should be regarded as an alternative to rather than a replacement for the classic posterior approach.
Further clinical studies, despite not observing the local anesthetic spread, have compared the sub-omohyoid SSN block with the interscalene nerve block or posterior SSN approach [3,4]. The sub-omohyoid SSN block results in a diminished forced vital capacity compared to baseline, though the impact is lower than with the interscalene block [4]. In contrast, another clinical study showed that in comparison to the posterior SSN block, the sub-omohyoid SSN block provides an additional block of the axillary nerve, suggesting that for the sub-omohyoid approach, the local anesthetic may reach at least the superior or intermediate trunk or the posterior division of the brachial plexus, which confirms the results reported by Siegenthaler et al. [2].

Concerns regarding the novelty of the DiSC block are disconcerting. The DiSC block is a novel, potentially safer and simpler anterior approach that involves a diagonal view of the SSC through which the SSN travels [1]. The approach proposed by Tran et al. [5] cannot be performed using an anterior approach because the clavicle conflicts with the ultrasound beam, preventing correct visualization of the SSC during the puncture; thus, the needle is inserted at a posterior entry point in the anterior medial direction using ultrasound visualization that is completely different from that with the DiSC block.

To date, the sub-omohyoid SSN block has either been referred to as an anterior or supraclavicular SSN block. Given the introduction of this novel anterior approach, the term “anterior SSN block” cannot be used as a synonym for the sub-omohyoid SSN. Although anterior SSN block approaches have clear advantages, the sub-omohyoid SSN block is a less selective “anterior SSN block” than the DiSC block [3,4] and may be riskier. Therefore, although the sub-omohyoid SSN block may be the first option in most patients, it must be avoided in high-risk respiratory patients [3]. In conclusion the diagonal suprascapular block is a simple, more selective in some scenarios and a safer anterior suprascapular nerve block.
References


