Sir,

Securing the phrenic nerve when achieving effective anesthesia block for the upper limb has been a topic intriguing regional anesthesia enthusiasts ever since. Interscalene brachial plexus block is known to involve the phrenic nerve in 100% of the cases and costoclavicular block which has gained momentum since 2015 is declared to involve the phrenic nerve in 0% of the cases.\(^{1}\) Besides this the compact, reliable topography of the cords in the triangular costoclavicular space along with an expedited sensorimotor block with local anesthesia deposited in the center of the three cords makes costoclavicular block an attractive option for elbow and below elbow surgeries.\(^ {1,2}\) According to the studies, the success rate of the blockade is 92.5% with single injection in the center of the cords.\(^ {2}\) Another study by Sebastian, where apart from classical single injection, another injection was given after redirecting the needle, between the medial cord and subclavian artery (labeling it a corner pocket technique) for costoclavicular block.\(^ {3}\) They concluded that the block’s onset time and total anesthesia-related time were significantly shortened with the double injection technique compared with single injection. The basis of this was explanation laid by Dr. Monzo and Hadzic where they proposed in a series of 40 patients a linear septum arising from the lateral part of axillary artery separating the lateral code from the posterior and the medial code, thus compartmentalizing the costoclavicular space.\(^ {4}\) They reported a success rate of 97.5% in their study on 40 patients.\(^ {4}\) Hence, double injection is used to overcome the septum “issue.”

Pornpatra is defined a high definition ultrasonographic presence of paraneural sheath and facial compartments surrounding the brachial plexus cords at the lateral infraclavicular fossa and the costoclavicular space.\(^ {5}\) We propose that a triple injection with 3\(^ {rd}\) injection in the vicinity of the lateral cord just before withdrawing the needle apart from the other two injections significantly shortens the onset time of sensory block from 16 min\(^ {3}\) to 9 min (Figure 1). The various sites for injection are shown in the figure below, but the exact point of injection of the second and third is more prominent after giving the first injection. The chances of the median nerve sparing as has been reported in some cases in previous studies are almost nil by this technique - the corner pocket injection that involves the medial root of the median nerve and the lateral cord that is specifically blocked separately covering the lateral root of the median nerve.

**CONCLUSION**

We did a case series in 15 cases and although the sample size is small and this is definitely not a randomized control trial, to make such a bold statement, we would like to decipher...
a positive future of the costoclavicular block with triple injection technique with an RCT already underway.

**AVAILABILITY OF DATA**

Our data, including raw dataset, are available upon request from the corresponding author.

**Key words:** Costoclavicular block; Triple injection; Cords

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