

# Interscalene Block

## Quick Guide

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**Any patient. Anywhere. Anytime.**

Information contained in this document is meant for quick reference and a supplement to formal ultrasound experience, education or training.



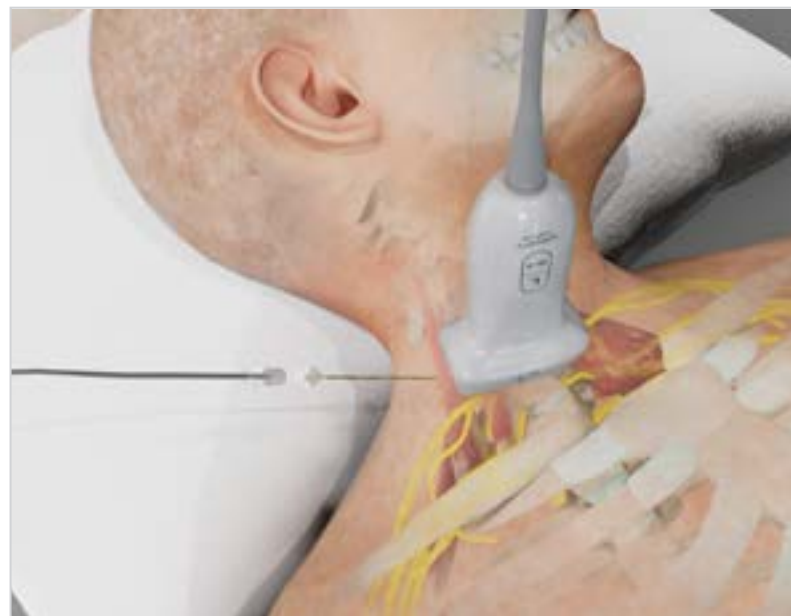
# Interscalene Block

## Objective

Injection of local anesthetic around the brachial plexus at the level of the C5, C6 and C7 Nerve Roots. Injection is performed between the anterior and middle scalene muscles.

## Procedure Description:

- The ultrasound transducer is placed transverse and superior to the clavicle to identify the subclavian artery and the brachial plexus located lateral and superficial to the artery.
- The ultrasound transducer is moved superiorly following the brachial plexus to the level of the cricoid cartilage.
- The C5, C6 and C7 nerve roots can be easily identified by ultrasound at this level.
- Use an in-plane needle technique with a posterior to anterior approach. Target the initial injection of local anesthetic to be placed lateral to the C6 nerve root.
- The block needle may be moved to multiple points of injection to ensure proper coverage and spread of the local anesthetic.



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## Clinical Pearls

### Patient Positioning:

Supine, back elevated 60 degrees with head turned away from procedural side

### Transducer:

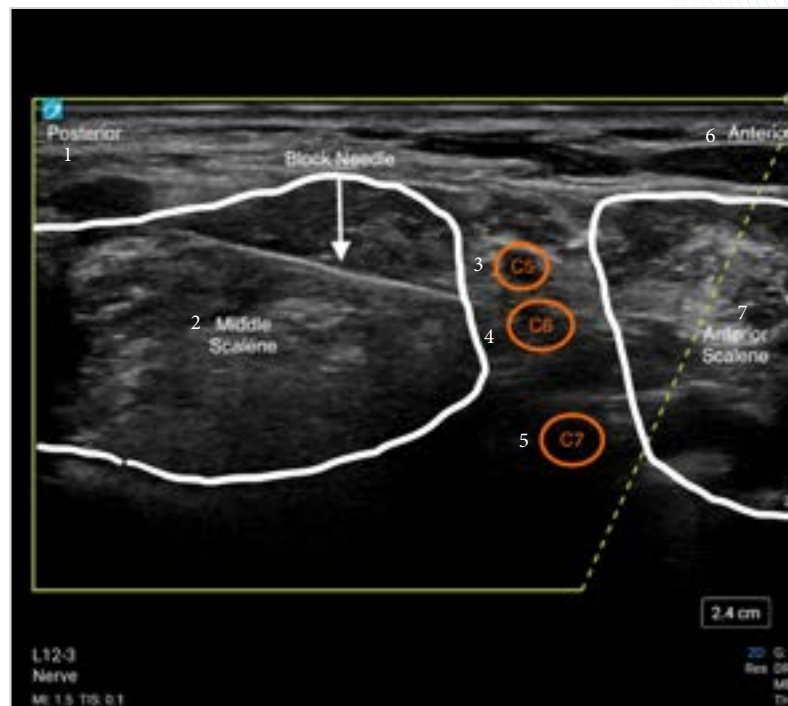
L15-4, L19-5, L12-3

### Technique:

- The interscalene block is a reliable motor and sensory block performed at the level of the C5, C6 and C7 nerve roots.
- Initial injection near or at the C6 nerve root often spreads completely around the brachial plexus enough so that the needle does not need to be repositioned.
- A shallow posterior in plane approach is used to avoid the long thoracic and dorsal scapular nerves located within the middle scalene muscle. These nerves may be visualized by ultrasound.

### Teaching Points:

- The interscalene block is contraindicated in patients with COPD, severe asthma and pulmonary hypertension as ipsilateral phrenic nerve block is a potential complication.
- A nerve stimulator may be used in addition to ultrasound guidance to assist in both identifying the nerve and/or avoiding an intraneural injection.
- IV sedation during the block procedure should still allow for meaningful communication with staff to assist in the detection of local anesthetic toxicity and possible intraneural injection.



**FIG. 2**

- |                          |                            |
|--------------------------|----------------------------|
| 1. Posterior             | 5. C7 Nerve Root           |
| 2. Middle Scalene Muscle | 6. Anterior                |
| 3. C5 Nerve Root         | 7. Anterior Scalene Muscle |
| 4. C6 Nerve Root         |                            |

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