

# Suprascapular Nerve Decompression Using MIS Spine Tubular Retractors: A Technical Note

Author Name(s): Raja Jani D.O., M.H.A., Gary Oxford M.D., Ahmad Alhourani M.D., Thomas J Altstadt M.D.

## I. Clinical Presentation

32M with previous ATV accident and focal left shoulder pain with 9-year history of focal left shoulder pain and worsening left shoulder abduction and external rotation weakness (4/5). Appreciable atrophy of left supra and infraspinatus with positive Tinel's sign over his left supra scapular notch



## II. Neuroimaging Findings & Workup

MRI C & T unremarkable, EMG inconclusive-Likely inadequate due to suboptimal evaluation of trapezius given needle length. Nerve block at supra scapular notch caused temporary but robust relief of pain

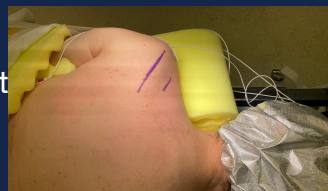


## III. Rationale

Based on clinical exam and response to nerve block in conjunction with failure of all conservative treatments that he could benefit from suprascapular nerve release

## IV. Positioning

Prone 5 point Jackson Table with bolster under the left shoulder reinforced with 3" silk tape



2cm incision that is 1.5cm above the spine of the scapula

## V. Steps

1. Opening of trapezius fascia & supraspinatus
2. Docking of MIS tubular retractors aimed at superior border of the scapula
3. Sequential dilation to 18mm
4. Muscle dissection & identification of suprascapular nerve & artery
5. Identification of nerve as it is exiting notch
6. Division of transverse scapular ligament
7. Hemostasis and closure

Using an MIS tubular retractor system, we were able to achieve a sufficient decompression using bimanual technique with excellent visualization via a singular 2cm incision without the need for continuous irrigation.

