

## Case Report: Treatment of A Painful Right Shoulder

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### Patient History & Examination

A 63 year old female was seen concurrently with an orthopedic surgeon for evaluation of persistent right shoulder pain that had failed conservative treatment. She complained of pain with weight bearing in her right arm, and pain at the 90 degree point of her shoulder arc with active shoulder flexion. She had positive impingement signs, pain with empty can supraspinatus test, but no weakness.

X-rays of the right shoulder showed spurring of the under surface of the acromion, and a discrete area of calcific tendinosis at the distal mid supraspinatus tendon. MRI confirmed sub-acromial bursitis, tendinosis of the supraspinatus, but no rupture of tendon. Ultrasound exam was performed as well, showing a discrete hyperechoic and hypoechoic portion of the tendon.

### Treatment

The patient underwent arthroscopic shoulder surgery, with sub-acromial decompression. To treat the tendinosis intra-operatively, the patient underwent non-traumatic debridement of the supraspinatus tendon from a percutaneous approach, utilizing ultrasound to visualize the diseased portions of the tendon. It was notably difficult to visualize the diseased portion of tendon under ultrasound guidance through the water inflated shoulder. The tenotomy device, TenJet was visualized with the arthroscope as well, and the tendon was entered, and debrided for approximately 2 minutes. Immediate post procedure x-rays were obtained, which showed approximately 50-70% improvement in the appearance of the calcified portions of the tendon.

### Ten Day Follow Up:

The patient was seen on post-operative day 10. X-rays were taken once again of the shoulder. At that time, some of the calcifications appeared to have returned, though the appearance was still improved. Clinically the patient was having less pain with weight bearing through the tendon. The reason for incomplete debridement of the calcified portions of the tendon were thought to be technique related, due to impaired visualization of the diseased tendon, made more difficult by the water inflated shoulder. Debriding the tendon prior to arthroscopy will be considered in future, but partial debridement was achieved, and the patient is having an excellent post-operative course thus far.

### Thirty Day Follow Up:

On one month follow up, the patient reports doing "quite well", did not give a pain score with movement but had no pain at rest. She had forward elevation of shoulder to 100 degrees, and 45 degrees of abduction. The arm immobilizer was discontinued, and she was begun in a physical therapy program.



Pre Operative



Post Operative