Percutaneous Tenotomy on a Golfer with Chronic Lateral Epicondylitis

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Abstract

Background: This case study examined the surgical treatment of a male 60-year-old golfer that presented with chronic lateral epicondylitis. After failing conservative measures and the typical treatments of “tennis elbow”, the athlete decided to undergo a percutaneous tenotomy of the common extensor tendon in an effort to completely eradicate the pain.

Purpose: The purpose of this case study to examine the effects of a ultrasound guided percutaneous tenotomy of the common extensor tendon in an athlete with chronic lateral epicondylitis.

Case Report

The patient’s pertinent history included an arthroscopic repair of the rotator cuff of the left shoulder 11 years prior. Before electing to undergo the elective percutaneous tenotomy surgery (known as Tenex) the patient underwent several modes of conservative treatment. The patient went through physical therapy, home exercise plans, and had attempted to use tennis elbow bracing. Additionally, he had received corticosteroid injections that later proved to provide no substantial relief.

The initial evaluation revealed point tenderness along the lateral epicondyle with no deficits in elbow and wrist range of motion. The patient reported the provocation of symptoms when partaking in golfing. Radiographic images revealed no fractures, subluxations, dislocations, or destructive lesions. However, magnetic resonance imaging (MRI) showed moderate calcific tendinosis of the common extensor tendon and a small ganglion cyst posterior to the lateral epicondyle of the humerus. Additionally, the MRI of the elbow showed evidence of moderate fraying at the ulnar collateral ligament and joint effusion. No bony abnormalities were revealed. The total procedure takes only about 15 minutes. Finally, when the calcific tendon has been treated, the physician closed the incision with a steri-strip with an occlusive bandage placed over it. An elbow sling was then placed on the patient to protect the incision site while the anesthesia wore off.

Before undergoing surgery, the patient noted that his pain levels were at a 6 out of 10 on the pain scale. Postop examination revealed that the incision site had appropriate postop appearance with no signs of infection. The patient experienced the expected amount of point tenderness on and around the lateral epicondyle. Additionally, normal nerve function of the axillary, musculocutaneous, median, ulnar, and radial nerve were noted.

At the 3 weeks post-surgery examination, the patient noted that his pain had reduced significantly to a 3 out of 10 on the pain scale with activity. Because his pain had not yet eradicated the leading physician and the patient decided to revisit physical therapy as a post-op treatment. After 3 sessions of physical therapy, the patient’s pain levels decreased significantly to a 1 out of 10 when gripping and rotating, but otherwise stated his elbow felt better.

Conclusion

There are several options as far as the treatment and management for lateral epicondylitis. It is recommended by most medical professionals that patients should start out by trying more conservative treatments, such as therapeutic exercises, and progressing to non-conservative treatments if warranted. Each case may differ, therefore, the course of treatment is primarily dependent on how the pathology presents in each respective patient. In this particular case study, the surgery was a success when considering the fact that his perceived pain was reduced significantly. However, further treatment was needed in order to reduce said pain to even lower levels.

References


