AB0879 ULTRASOUND GUIDED CALCIFIC DISLODGMENT IN SHOULDER AND ELBOW TENDONS

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Background: Patients with rheumatoid arthritis are prone to develop calcific tendinitis. Calcific tendinitis can lead to severe chronic pain and diminished function. Patients with such chronic conditions may not benefit from steroid injections and may be left with limited options including surgery.
Objectives: The advent of high resolution ultrasonography has helped in identifying osteophytes localized at the insertion of the tendon or calcification within the tendon.
Methods: We identified nine patients with chronic inflammatory conditions, seven of which had rheumatoid arthritis and the remaining two had lupus. Ultrasound was performed in all of the above patients utilizing Sonosite Titan 10MHz transducer. The pain was present for at least three months. These patients had failed previous corticosteroid injections. Six elbows and three shoulders were presented. Calcifications were noted at the insertion of the common extensor tendon in four of these patients with involvement of the common flexor tendon in the remaining patients. All three patients with shoulder involvement had osteophytes of the supraspinatus tendon sheath at the insertion. The patients with shoulder involvement presented with a limited range of motion. Patients with epicondylitis had pain and tenderness.
Results: Calcification within the common flexor and extensor tendon was noted in the distal portion of the tendon with the resultant enlargement of the tendon fibers with slight bony irregularity. Supraspinatus tendinitis was better identified in the longitudinal view. The osteophytes were isolated and were all present at the greater tuberocity. Under ultrasound guidance and with the needle directed parallel to the transducer, dislodgement of the calcification or the osteophytes was performed under sterile conditions and lidocaine infiltration. All patients tolerated the procedure and the needle was visualized directly while dislodging the calcification with repeated insertion. Follow-up ultrasound after the procedure revealed that the calcifications in four of the tendons had remotioned, and improved in the remaining patient with elbow involvement. The osteophytes at the insertion of the supraspinatus were all remotioned with this procedure. Upon follow-up with eight of these patients, six reported resolution of pain and improvement in function.

Conclusion: We have previously reported that chronic tendinopathy can be aided by a what is referred to as "teasing". In this report, we show that certain patients with chronic inflammatory conditions who have calcific tendinitis or osteophyte at the insertion of the tendon can be managed in the office under ultrasound guidance. This technique may be referred to as "calcific dislodgment" under ultrasound guidance. It is safe and seems to be effective.
References: Connell D, Burke F,Coombes P, et al Sonographic Appearance of Lateral Epicondylitis. 2001 AJR 176(3) 777-782

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FRI0192 CLINICAL RESPONSE FOLLOWING THE FIRST TREATMENT COURSE WITH RITUXIMAB: EFFECT OF BASELINE AUTOANTIBODY STATUS (RF, ANTI-CCP)

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Objectives: To explore the relationship between baseline autoantibodies (rheumatoid factor [RF] and anti-cyclic citrullinated peptide [anti-CCP]) and clinical response after the first course (2 x 1 g, 2 weeks apart) of rituximab (RTX) in rheumatoid arthritis (RA) patients (pts) with an inadequate response (IR) to ¡Ý1 tumour necrosis factor (TNF) inhibitors.
Methods: RA pts on continuing background methotrexate (MTX) who had an IR to ¡Ý1 TNF inhibitors were randomised to RTX or placebo (PLC) as previously described (1). Baseline serological status for RF (positive: >20 IU/L) and anti-CCP (positive: >5 IU/L) was determined. EULAR responses were assessed at Week 24 using non-responder imputation. Responses are reported by two pt subgroups: pts seronegative for both RF and anti-CCP antibodies at baseline, and pts seropositive for either or both RF and anti-CCP at baseline.
Results: A high degree of efficacy was observed in pts who were seropositive for either or both autoantibodies, with 75% and 29% of pts in the RTX and PLC arms, respectively, achieving a EULAR good or moderate response, consistent with rates of response previously published (65% and 22% in the RTX and PLC arms, respectively [1]). EULAR responses in pts who were seronegative for both RF and anti-CCP were lower for pts in both the PLC and RTX arms (14% and 44%, respectively) relative to the corresponding seropositive pts (29% and 75%, respectively), indicating that this is a distinct pt population. However, significantly more seronegative pts receiving RTX (44%) achieved a EULAR good or moderate response compared with the respective PLC-treated pts (14%, $p<0.05$), indicating that treatment with RTX still provides a benefit in the seronegative subgroup. In pts who responded to their initial course of RTX, repeat courses were associated with sustained efficacy, irrespective of whether pts were seropositive or seronegative.

Conclusion: These findings confirm that treatment with RTX is an effective, innovative therapy for RA pts. Pts seronegative for both RF and anti-CCP achieved clinical benefit, as significantly more pts receiving RTX achieved a EULAR good or moderate response compared with the respective PLC-treated pts. This suggests that mechanisms in addition to the suppression of pathogenic autoantibodies (e.g. antigen presentation, T cell co-stimulation, cytokine release or aberrant B cell response) may account for response to RTX therapy.
References: 1. Cohen, et al. Arthritis Rheum 2006;54:2793–2806.