

# ACCURACY OF INJECTION THERAPY IN TENNIS ELBOWS BY EXPERIENCED ORTHOPEDIC SURGEONS IN CADAVERS

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## INTRODUCTION

Different injection therapies are used in the treatment of Lateral Epicondylitis (LE). Usually, it affects the Extensor Carpi Radialis Brevis (ECRB) tendon. Therefore, an injection should be performed at the location of the ECRB tendon.

What is the accuracy of manual injections performed in the ECRB tendon and what techniques are being used?

## METHOD

Twenty surgeons experienced in the upper extremity completed a questionnaire about their usual 'work up' to, and injection technique of LE. The ten most experienced of these surgeons have infiltrated a cadaver elbow with acrylic paint, using the same injection technique that they would use in the treatment of LE. Afterwards, an arthroscopy and dissection of the elbow was performed. The injection technique and localization of acrylic paint was reported.

## RESULTS

The 'work up' of LE is similar between surgeons. In the treatment of LE, 88% uses corticosteroid injections, 29% autologous blood and 24% platelet-rich blood plasma. Dextrose and hyaluronic acid is hardly used. Dissection revealed that only a third of the injections in the cadaver elbows was (partially) localized in the ECRB tendon. 60% was localized intra-articular. In addition, the acrylic paint was localized in the Extensor Carpi Radialis Longus tendon (n = 6), anconeus muscle (n = 3), lateral epicondyle (n = 3), triceps brachii muscle (n = 2) and brachioradialis muscle (n = 1). The number of perforations during the treatment varied between 1 and 10.

## CONCLUSION

The 'work up' of LE is done in a uniform way; however, the treatment is highly variable. Injections carried out manually for the treatment of LE are not accurate, resulting in the majority being localized intra-articular.