

FENESTRATION OF THE ECRB TENDON BY MEANS OF AN INNOVATIVE STANDARDIZED, REPRODUCIBLE TECHNIQUE A PILOT STUDY

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INTRODUCTION

No consensus has been reached on which injection therapy is most effective in the treatment of Lateral Epicondylitis (LE), which usually involves the Extensor Carpi Radialis Brevis (ECRB) tendon. Current studies correlate poorly due to great diversity in injection technique, where injections are usually performed manually and 'blindly'.

Recently, a device (ITEC; Instant Tennis Elbow Cure. ITEC Medical, Enschede) has been developed to standardize the injection technique.

This pilot study describes the first experiences with ITEC for the treatment of LE and focuses on potential complications caused by this new technique.

METHODS

25 patients with LE were treated with standardized fenestration performed by an experienced upper limb surgeon using the ITEC-device. An ultrasound-guided depth measurement of the ECRB was performed prior to the perforation of the tendon. The elbow was positioned in a standardized manner, using laser pointers. The perforations of the ECRB tendon were performed in an automated and standardized manner, using a set of 3x4 needles, adapted to the anatomy of the ECRB. Complications were noted. Pain scores and the Oxford Elbow Score were evaluated at baseline, and 8 and 16 weeks after treatment.

RESULTS

There were no complications reported during the 16 weeks follow-up. There was no deterioration on the pain score or Oxford Elbow Score.

CONCLUSION

Standardized perforation of the ECRB in the treatment of LE via the new ITEC-device demonstrated no side effects or complications in this pilot study of 25 patients. In future studies, ITEC may be used to compare different injection therapies in a standardized manner.