Outcome of surgery after failed ESWT

Authors:
Gerold Labek, V. Auersperg, N. Poulios, E. Hinterreiter, A. Handelbauer, N. Böhler

Institution:
Orthopaedic Department, AKH, Linz

Introduction:
ESWT is used in the therapeutic spectrum in our department for patients, which have done intensive conservative treatment for months without any success. This procedure and ESWT might lead to a selection process for patients.

Aim of this retrospective study was to evaluate, if the chance for success of surgical interventions are decreased by this process and to evaluate the outcome of surgery after failed ESWT to these patients.

Material and Methods:
From 1993 to 2002 760patients have been treated by ESWT at AKH Linz. 189 of them for lateral Epicondylitis and 183 for plantar fasciitis.
53% of EHR and 80% of plantar fasciitis treatment were successful according to Auersperg - Score levels 6 and 7, which includes only excellent and good results.
Out of the patients with failed treatments 34 patients suffering lateral epicondylitis and 18 patients suffering plantar fasciitis have been treated by a surgical procedure, most of them in our clinic. EHR was treated by a Hohmann operation (originally described by G. Hohmann: Das Wesen und die Behandlung des sogenannten Tennisellenbogens. Münch Med Wochenschr 1933; 80: 250-252), plantar fasciitis by a tenotomy of the plantar fascia and denervation of the calcaneal periosteum.
13 patients (out of 18) suffering plantar fasciitis and 26 (out of 34) suffering EHR could be evaluated by a follow up period of at least 1 year after operation.
Auersperg-Score and VAS was recorded.

Results:
Plantar Fasciitis
6 Patients were pain free, 4 reported major improvement without need of further therapy. 3 patients has no or unsatisfying improvement by the operation.
76% of the patients had satisfying benefit by a Hohmann operation after failed ESWT.
EHR:
17 patients were pain free, 7 reported major improvement without need for further therapy, 2 patients had no or unsatisfying improvement by the operation.
92% of the patients had satisfying benefit by a tenotomy procedure after failed ESWT.
This is similar to reported success rates in the literature without ESWT before.

Conclusion:
Low Energy ESWT seems not to influence the success of surgical procedures by selection of patients or other reasons.
Further studies should be performed for more detailed evaluations. Larger multicentre databanks for recruitment and description of patients would be recommended.