## Comparison of the clinical results of Hilterapia<sup>®</sup> and eswt in the lateral epicondylitis.

## Kang H.J., Her M.S.

Department of Orthopaedic Surgery, Yongdong Severance Hospital, Yonsei University College of Medicine, Seoul, Korea

## **ABSTRACT**

Lateral epicondylitis, so called tennis elbow, is the term used to describe the pain of uncertain pathogenesis that is centered over the common extensor origin, at the lateral aspect of the elbow, and that interferes with the activities of daily living, sports and work.

Tennis elbow is a degenerative condition of the tendon fibers that attach on the bony prominence (epicondyle) on the outside (lateral side) of the elbow.

The tendons involved are responsible for anchoring the muscles that extend or lift the wrist and hand.

The aim of this study was to compare the efficacy of Hilterapia® against ESWT (Extracorporeal Shock Wave Therapy) in patients with lateral epicondylitis of the elbow.

Fifthy subjects, subdivided in two groups, have been included in the study. The inclusion criterion was: lateral epicondylitis with failure of at least 6 months of conservative treatment.

One group was treated with Hilterapia® (9 sessions, three time a week) and the other

group with ESWT (3 sessions, one/week). Results have been evaluated by using VAS (visual analog scale) and SET (simple elbow test) score at baseline and after one, three and six months. After nine months, the patient's satisfaction index has been evaluated by Roles and Maudsley score. Equipments used were HIRO 3 (ASA, S.r.l., Vicenza, Italy) and EvoTron (Switech Medical AG, Kreuzlingen, Switzerland). Each group achieved improvement at each follow up, in all parameters measured. The major improvement was achieved in both groups during the first months and continued to a lesser extent for up to six months. No significant differences between Hilterapia  $\bar{\mbox{\ }}$  and ESWT groups were detected across the different time periods in any measured parameter.

This study suggests that Hilterapia® could be considered as safe, effective and noninvasive treatment modality for lateral epicondylitis. Another one attractive merit of the Hilterapia® is that patients do not have pain or side effects during the treatment and therefore the satisfaction index of patients is very high.