Clinical Evaluation of Electro-acupuncture plus Stretching Exercises in treating Tennis Elbow
NG CL, HO WL, LAW YT
Physiotherapy Department, Pok Oi Hospital

Keywords:
acupuncture
tennis elbow
stretching exercise
physiotherapy
electroacupuncture
Quchi

Introduction
Tennis elbow is an overuse injury occurring at the common extensor tendon that originates from the lateral epicondyle. Electro-acupuncture plus stretching exercises on the relevant wrist extensor muscle and tendon were found to be effective in reducing the pain and improve handgrip strength of the patients.

Objectives
To evaluate the effectiveness and efficiency of Electro-acupuncture plus stretching exercises in treating tennis elbow.

Methodology
27 patients with tennis elbow, aged between 32 and 60, were recruited from April 2008 to November 2012. They all received a treatment program with electro-acupuncture on the trigger point and acupuncture point of LI 11 (Quchi) on the relevant wrist extensor muscle and tendon plus stretching exercises. Clinical outcome variables including pain by the Chinese numeric pain rating scale (Chinese NPRS), handgrip strength by using hydraulic hand dynamometer and global recovery of patients with the Numeric global rating of change scale (NGRCS); were collected at first assessment and upon discharge. The number of physiotherapy sessions of individual patient was also recorded.

Result
All outcome variables were significantly improved. Among the 27 patients, the mean score of Chinese NPRS decreased from 6.9 (SD 1.4) to 1.7 (SD 2.0) with 95% CI 4.4 to 5.9 (p<0.001). The mean score of handgrip strength increased from 16.6 (SD 9.9) to 22.7 (SD 10.2) with 95% CI -8.6 to -3.6 (p<0.001). The mean score of NGRCS increased from 0.00 (SD 0.00) to 6.9 (SD 1.8) with 95% CI -7.7 to -6.2 (p<0.001). The median number of physiotherapy sessions for individual patient was 7.
Electro-acupuncture plus stretching exercises were found to be effective and efficient
in treating patients with Tennis Elbow in term of pain reduction, improvement of handgrip strength and global recovery.