

### *Summary and Conclusion*

This study was carried out on 50 individuals attended the outpatient clinic of Rheumatology and Rehabilitation department of Mansoura Insurance Hospital and Banha University. They were divided into 1 control group and 3 treatment groups.

- 1- Control group contain 20 apparently healthy volunteers with matched age & sex with our patient (7 males & 13 females) mean age  $40.6 \pm 4.4$  years.
- 2- Group I (G1) received acupuncture treatment for 1 month (2 session/week) including 4 males & 6 females had mean age of  $39.0 \pm 4.6$  years.
- 3- Group II (GII) received U/S Plus TENS for one month (3 session/week) including 3 males & 7 females had mean age  $39.1 \pm 6.3$  years.
- 4- Group III (GIII) received surgical treatment including 3 males and 7 females had mean age of  $40.6 \pm 4.4$  years.

#### **All patients were subjected to the following:**

- 1- History taking.
- 2- Clinical assessment including (pain, numbness, parathesia weakness and night awakens).
- 3- Laboratory investigation including ( CBC, Urine analysis, ESR, RF and Thyroid Function Test).

- 4- Nerve conduction study including measurement of DSL, DML, CMAP, SNAP and W-PNCV).

**The aim of the present study** Was to compare the efficacy of acupuncture in the treatment of mild-to-moderate CTS versus ultrasound plus transcutaneous electrical nerve stimulation (TENS) and surgical management.

**The Finding of this study were as follows:**

- 1- In the acupuncture receiving group (GI), there was statistically significant improvement in clinical parameters.
- 2- In the acupuncture receiving group (GI), there was statistically significant improvement in nerve conduction studies parameters with the exception of the compound muscle action potential.
- 3- In the US plus TENS receiving group, we also noted a statistically significant improvement in clinical parameters
- 4- In the US plus TENS receiving group, we also noted a statistically significant improvement in nerve conduction studies after treatment with exception of CMAP.
- 5- In the surgical treatment, we also noted a statistically significant improvement in clinical findings.
- 6- In the surgical treatment, we also noted a statistically significant improvement in NCS Including CMAP.
- 7- When we comparing the three therapeutic modalities together, we noted a statistically significant differences only in GSS

where surgical treatment has statistically less improvement when compared with other treatment modalities.

- 8- When we comparing the three therapeutic modalities together, we noted that there is no statistically significant differences among groups regarding NCS.

### **Conclusion:**

*From our study, we can conclude that:*

- Acupuncture has efficiency in the treatment of mild to moderate CTS.
- The present study demonstrates that acupuncture is as effective as US plus TENS therapy and surgery in short-term follow up.
- Further long-term studies are recommended to assure the efficacy of this treatment option on the long run.

### **Recommendation:**

*From this work we should recommended:*

- Further long term studies are recommended to assure the efficacy of different treatment options of CTS.
- We also recommended to do nerve conduction study after treatment of CTS to quantify the improvement.