

and after daily treatment by measuring of pain threshold through pressure algometer and pain intensity through visual analogue scale (VAS) and (2) before and after termination of all 3 methods by using the degree of muscular spasm and verbal descriptive scale. Initially, the effectiveness of TENS was compared with that of the placebo for the same 3 methods of electrode placement given to individual patient. This was studied in 36 from 102 patients. The evaluation was done by measuring of pain threshold and pain intensity, as mentioned above.

The comparison between the TENS and placebo indicated that TENS was more effective with statistically significant difference in both pain threshold values ($p < 0.005$) and by VAS ($p < 0.05$) than the placebo for all methods of electrode placement. From this thesis, there was no statistically significant difference in both pain threshold and VAS ($p < 0.05$) among 3 methods of electrode placement. The results of muscular spasm assessment were as follows; absence of spasm 19, reduced 33, no change 49 and increased of spasm only one. In addition, it was found that only 52.9% (54 patients) were relieved by TENS treatment. The percentage of complete pain relief, nearly complete pain relief and partial pain relief were 4.9%, 21.6% and 25%, respectively.