

THE EFFICIENCY OF TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION (TENS) IN PERIPHERAL POLYNEUROPATHY IN DIABETES MELLITUS, CHRONIC KIDNEY DISEASE AND PRIMARY HYPERTENSION.

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INTRODUCTION AND AIMS

The polyneuropathies associated with diabetes mellitus type 2 and chronic renal disease are referred by long term complications. Especially, painfull polyneuropathy situations decrease the quality of the patient's lifes severely. Transcutaneous Electrical Nerve Stimulation (TENS) is a method which is used in painfull polyneuropathy treatment. In our study, we tried to evaluate the analgesic efficiency of Transcutaneous Electrical Nerve Stimulation (TENS) in uremic&diabetic polyneuropathy patients' life quality and recovery of symptoms.

METHODS

60 patients admitted to the Cukurova University Faculty of Medicine, Nephrology and Endocrinology Out patient Clinics between 2010 – 2012 who had been diagnosed peripheric polyneuropathy associated with Diabetes Mellitus and Stage 4 or 5 Chronic Renal Disease were included in this study. In Patients with diabetes mellitus type 2 and chronic renal disease. Disease related symptoms, medication usings, disease and neuropathy duration time were recorded. General physical examination was performed and routine laboratory tests, vitamin B12 and folate levels were asked in all patients. Before and after the treatment of Transcutaneous Electrical Nerve Stimulation (TENS) therapy international scalas such as VAS (visual analog scala), LANNS (Leeds assesment of neuropathic symptoms and signs pain scale) and NHP (Nottingham health protocol) were performed and recorded. Transcutaneous Electrical Nerve Stimulation (TENS) therapy was applied to thepatients 30 minutes daily for 3 weeks by physiotherapists in Departmant of Physical Therapy of Cukurova University.

RESULTS

Significant recovery were assessed with in symptoms, in patients life quality plus some decriments in systolic and diastolic blood pressures before and after therapy by using continiously blood pressure recorders and using parameters includings VAS, LANNS and NHP scalas.

CONCLUSIONS

In our study, the symptoms of painfull polyneuropathy patients are improved withTranscutaneous Electrical Nerve Stimulation (TENS) therapy. Besides, there were significant improvement in life quality of patients. Transcutaneous Electrical Nerve Stimulation (TENS) therapy is a valuable alternative therapy to drug therapy in patients. We believe every such patients must have the right to use this very advanced technologically developped treatment modality. This is a sine qua non medical approac modality.

