Introduction and Aim of the work

Carpal tunnel syndrome (CTS) is the most common entrapment in the upper limbs and is one of the most common diagnoses in patients who present to an electrodiagnostic laboratory for evaluation. The incidence and prevalence vary according to age and occupation. Generally, the incidence of CTS has been reported to be roughly 100 to 300 cases per 100,000 persons/year. The prevalence has been reported to be roughly 3% to 6% of general population. Age has a significant effect on incidence, with incidence in women increasing gradually with age and reaching a peak between 50 and 59 years, after which it declines. In men there is a bimodal distribution, with peaks between 50 and 59 years and between 70 and 79 years. Geography also has an effect. Rural and industrial areas have a higher incidence than urban areas which is likely related to occupation risks ***(Mondelli et al.,2002).***

Acupuncturists insert thin needles into specific points on the body. Traditional theory holds that blockages along energy pathways in the body, called meridians, can cause pain. Acupuncture release these blockage and improve the flow of energy along meridians ***(Hsieh et al.,2001)***

A scientific explanation is that acupuncture may release natural pain-relieving chemicals into the body, promote circulation in body, and balance the nervous system. Acupuncture points are generally on the wrist, arm, thumb, and hands, as well as other parts of the body such as the upper back, neck, and legs. The number of acupuncture sessions

depends on various factors such as how long did the patient have had the symptoms, symptoms intensity, how much does he use has arms and hands, and his overall health ***(Robert and Emanuel,2001).***

Conservative management has a place in the early management of mild to moderate CTS and may reduce the number of patients undergoing surgical intervention. Non surgical management also has a place in those waiting for surgery or for those who choose not to have surgery. There is strong evidence that local steroid injection give short term relief for CTS sufferers. There is conflicting evidence suggesting that therapeutic ultrasound is effective. There is insufficient evidence to evaluate whether nerve and tendon gliding exercises or transcutaneous electrical nerve stimulation (TENS) are effective modalities ***(Gooch and Mitten, 2005).***

Surgery can be effective treatment for CTS, but prediction on its outcome depends on the accuracy of the diagnosis before the surgical intervention and the timing of surgery in regard to the onset of symptoms. However, it is widely considered that surgery may be ineffective in extreme cases ***(Mondelli et al., 2001).***

Multiple and varied approaches have been described for diagnosing CTS using electrophysiological techniques. In general the approach to nerve conduction studies should include measurement of sensory and motor conduction of the median nerve across the wrist. It is generally wise to compare these measures with nearby nerves (radial or ulnar) that do not traverse the carpal tunnel to exclude the effect of temperature and polyneuropathy ***(Johnson, 2007).***

Aim of the work

The aim of this study is to compare the efficacy of three treatment plans in the management of carpal tunnel syndrome: acupuncture, conservative measures (ultrasound and transcutaneous electrical nerve stimulation) and surgical treatment