INTODUCTION

INTRODUCTION

Carpal tunnel syndrome is one of the commonest minor conditions presenting to the orthopaedic and physical medicine out patient clinics.

Different aetiological causes were incriminated including anatomical, congenital, traumatic, idiopathic, water retention, vit. deficiency, vascular insufficiency, compartmental syndrome, etc. (Michaud et al., 1990), (Schuind et al., 1990), (Chiang et al., 1990), (Folkers and Ellis, 1990).

Different methods have been used in diagnosis of this condition starting from history of the typical nocturnal parathesia, local hyposthesia of the median nerve distribution, Phalen test 1902, Tinel sign 1906, more recently the tourniquet test, local compression test of the median nerve at the wrist, self sensory mapping, combination tests to increase the specificity, finger flicking sign, finger clicking test (Kazem 1992).

Various methods to diagnose accurately median nerve compression at the carpal tunnel including nerve conduction velocities using E.M.G. with variable techniques using needle electrodes or surface electrodes, ultrasonography, C.T of the carpal tunnel and MRI exam.

The main line for treatment of C.T.S is surgical release of the transverse carpal ligament. Some surgeons & physiatrists use local injection of corticosteroids with variable success (G.H. Kazem and M.O. Hegazi, 1985).

The aim of this essay is to evaluate this syndrome as regards the new methods in diagnosis with special reference to it's sensitivity and specificity with special emphasis to anatomical variation of the median nerve at the carpal tunnel and different techniques of treatment.