

Survey the Etiology, Location, and Type of Damage in Foot Drop Patients

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Abstract

Introduction: A most common cause and distressing problem in patients who referred to electrodiagnosis clinic is foot drop. This disease can have diverse etiology. Electrodiagnostic examination is a useful study in recognizing the site of injury, the degree and type of lesion and predicting the degree of recovery. Distribution of etiology and location of lesion are different in various studies.

Objective: To investigate the etiology, site and type of lesion in foot drop patients who referred to poorsina hospital Electro Diagnostic Examination (EDX) clinic.

Materials and Methods: In this descriptive cross sectional study 58 acquired foot drop patients who referred to Electro Mio Graphy (EMG) department were investigated clinically and electrodiagnostically. Their muscle strength was 3 or less than 3 according to Medical Research Council scale.

Results: Among 58 patients, 30 patients (51.7%) were male and 28 patient (48.3%) were female. The mean age of them was 41.64 (standard deviation was 14.97). The mean age of patients was higher than which expected from other studies and female s mean age was significantly higher than male s mean age (P=0.02). Distribution of various causes and locations of injury was significantly different among age groups (P=0.001 and P=0.005 respectively). The most common cause of foot drop was peroneal

neuropathy in patients younger than 35 and L5 radiculopathy in older patients. 33 patients (56%) had pain (17 radicular pain and 16 non radicular pain) as a main complaint beside foot drop. The most common location of damage was L5 root and the most common known etiology was trauma.

Conclusion: Contrary to most of other studies, L5 radiculopathy was the most common cause of foot drop. It seems that etiology and location of lesion are dependent to the specific population and age of them. In most patients clinical distribution of pain was consistent with electrophysiological localization of lesion; therefore EDX study was most useful in patients that didn't have any pain with foot drop.

Key words: Foot Diseases/ Gait Disorders, Neurologic/ Radiculopathy/ Wound and Injuries