Report of 121 Cases of Bell's Palsy Referred to the Emergency Department

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Abstract

Introduction: According to the high incidence of Bell's palsy (IFP) and lack of clinical data regarding different aspects of disease, the present study investigated 121 Iranian patients with peripheral facial paralysis referred to the emergency department.

Methods: In this retrospective study, all patients with peripheral facial paralysis, referred to the emergency department of Poursina hospital, Rasht, Iran, from August 2012 to August 2013, were enrolled. For all patients with diagnosis of Bell's palsy variables such as age, sex, occupation, clinical symptoms, comorbid disease, grade of paralysis, and the severity of the facial palsy were reviewed and analyzed using STATA version 11.0.

Results: A total of 121 patients with peripheral facial paralysis were assessed with a mean age of 47.14±18.45 years (52.9% male). The majority of patients were observed in the summer (37.2%) and autumn (33.1%) and the recurrence rate was 22.3%. The most common grades of nerve damage were IV and V based on House-Brackman grading scale (47.1%). Also, the most frequent signs and symptoms were ear pain (43.8%), taste disturbance (38.8%), hyperacusis (15.7%) and increased tearing (11.6%). There were not significant correlations between the severity of palsy with age (p= 0.08), recurrence rate (p=0.18), season (p=0.9), and comorbid disease including hypertension (p=0.18), diabetes (p=0.29), and hyperlipidemia (p=0.94). The patients with any of following symptoms such as ear pain (p<0.001), taste disturbance (p<0.001), increased tearing (p=0.03), and Hyperacusis (p<0.001) have more severe palsy.

Conclusion: There was equal gender and occupational distribution, higher incidence in fourth decade of life, higher incidence in summer and autumn, higher grade of nerve damage (grade V and VI), and higher incidence of ear pain and taste disturbance in patients suffered from IFP. Also, there was
significant association between severity of nerve damage and presence of any simultaneous symptoms.

Keywords: Bell palsy; facial nerve diseases; paralysis; epidemiology; peripheral neuropathy