

Prevalence of facial nerve palsy in the neuro-medicine private clinic

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ABSTRACT

Background. Due to dysfunction of the facial nerve (CN VII), Bell's palsy occurs which is a facial paralysis of unknown cause, but viral infection is suspected. The study aims to determine the prevalence of facial nerve palsy in a private clinic in Basrah.

Methods. The study was conducted at a private clinic and involved sixty-five patients with facial nerve palsy. It was a cross-sectional study in which any patient who attended the clinic and exhibited signs and symptoms of lower motor neuron facial nerve palsy underwent an examination to confirm the diagnosis and, if confirmed, were included in the study. While patients with other neurological disorders were excluded. Data collection started between October 1, 2022, and April 30, 2023. A total of 65 patients from the private clinic—males and females—aged from 4 to 70 years old were confirmed as having lower motor neuron facial nerve palsy.

Results. This study at a private clinic found that Bell's palsy was the most common facial paralysis, affecting more males than females and most of the patients in the age range of 18-39 years, also affecting mostly the left side, with onset more frequent during hot and cool weather conditions. Diabetes was significantly related to the onset of Bell's palsy and weather temperature at the time of the clinic visit.

Conclusion. Bell's palsy has a peak age prevalence in the second and third decades of life, and temperature variations have no effect on the occurrence of Bell's Palsy. Further studies are needed for an accurate estimation of the number of cases, to assess the severity, impact, and efficacy of Bell's palsy management.

Keywords: Bell's palsy, facial nerve, facial paralysis, lower motor neuron, viral infection

INTRODUCTION

Disorders of the facial nerve result from injury to the nerve that regulates facial movement and expression. Viral infections, strokes, inflammation, trauma, surgeries, tumors or others can all cause paralysis or weakness of the face [1,2]. Bell's palsy is the most prevalent defect in the lower motor of the facial nerve [3]. Bell's palsy, also known as Idiopathic Peripheral Facial Palsy, is a facial paralysis that is caused by a malfunction of the Cranial Nerve VII, the Facial Nerve [4].

In the UK, the yearly incidence of Bell's palsy currently stands at 37.7 per 100,000 people [5]. Comparatively, it is around 23 per 100,000 persons annually

in the US [6]. Between 11.5 to 40.2 incidences of Bell's palsy are reported worldwide for every 100,000 individuals [7].

It is critical to determine if the facial nerve paralysis is central or peripheral. Central lesions cause paralysis of the lower face only, sparing the forehead; however, clinicians must ensure that they ask about the duration and nature of symptoms in their history, including the presence of associated symptoms such as hyperacusis, posterior auricular pain, taste, and lacrimal changes. All patients who come with facial palsy require a comprehensive cranial nerve evaluation, as well as ophthalmic, otologic, and oral tests [8].

The impact of DM is explained by the peripheral circulatory dysfunction associated with diabetes that

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