## Case Report / Olgu Sunumu



# A Rare Presentation of Conversion Disorder: Palpebral Ptosis

Nadir Görülen Bir Konversiyon Bozukluğu: Palpebral Pitozis

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#### ABSTRACT

Palpebral ptosis is an extremely rare manifestation of conversion disorder. Presented here is a 14-year-old girl with acquired palpebral ptosis characterized by diurnal variation and initially diagnosed as juvenile myasthenia gravis. The normal eyelid muscle strength accompanied with eyebrow depression during ptosis, improvement with saline injection and normal electrophysiological findings led to the diagnosis of conversion disorder. After the exclusion of organic causes, conversion disorder should be kept in mind in the differential diagnosis of acquired palpebral ptosis particularly when accompanied by eyebrow depression. *The Journal of Pediatric Research 2014;1(1):33-5* 

Key Words: Palpebral ptosis, myasthenia gravis, conversion disorder, eyebrow depression

### Introduction

Palpebral ptosis is defined as drooping of the upper eyelid due to partial or total reduction in the levator palpebrae muscle function. Ptosis can be present at birth or develop later in life. Acquired ptosis may be due to myogenic, neurogenic, aponeurotic, mechanic or traumatic causes (1). Myasthenia gravis is of importance in the differential diagnosis of ptosis of varying severity. Generalized or ocular myasthenia gravis is usually present with ptosis or diplopia or sometimes both (2). Another cause of acquired palpebral ptosis is conversion disorder, but is rarely mentioned in the literature.

#### ÖZET

Palpebral pitoz son derece nadir görülen bir konversiyon bozukluğu şeklidir. Burada, diurnal varyasyon özelliği olan palpebral pitoz ile başvurarak öncelikle jüvenil miyastenia gravis tanısı alan bir konversiyon olgusu sunulmaktadır. Pitoz sırasında göz kapağı kas gücünün normal olması, eş zamanlı olarak kaşın düşük görünmesi, salin enjeksiyonu ile semptomların düzelmesi ve normal elektrofizyolojik bulguların varlığı konversiyon tanısının konmasını sağlamıştır. Palpebral pitozun ayırıcı tanısında, organik nedenler dışlandıktan sonra, özellikle eşlik eden kaş düşüklüğü varlığında konversiyon bozukluğu akılda bulundurulmalıdır. *The Journal of Pediatric Research 2014;1(1):33-5* 

Anahtar Kelimeler: Palpebral pitozis, miyastenia gravis, konversiyon bozukluğu, gözkapağı düşüklüğü

## **Case Report**

A 14-year-old girl was admitted to our hospital with bilateral ptosis and fatigue. She also described blurred vision and diplopia in the right eye for the last one month. She noted worsening of her symptoms over the course of the day. The neurological examination revealed normal muscle strength and tonus of the extremities with normal deep tendon reflexes. Eye movements to all directions were normal and diplopia did not occur. Repetitive eye closure resulted in bilateral ptosis which was more significant on the right side. Ice-pack test was negative. Laboratory parameters including hemogram, liver and renal function tests, creatinine kinase, lactic acid and pyruvic acid levels

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were all within normal ranges. Electromyography revealed normal nerve conduction velocities as well as normal single fiber electromyography. No decremental response was obtained in repetitive stimulation. Cranial MRI and orbital ultrasonography yielded normal results. Although the laboratuary tests did not support the diagnosis of myasthenia gravis, pyridostigmine was prescribed at 1 mg/kg/day dose based on the clinical findings. The girl, who had no improvement with pyridostigmine and whose anti-acetylcholine receptor antibody was negative, was hospitalized for further examination. On repeated neurologic examinations, it was recognized that the strength of the eyelid muscles was normal during ptosis and eyelid ptosis was accompanied by depression of the eyebrows predominant on the right side. The girl was considered to have conversion disorder and ptosis improved after intramuscular injection of saline as placebo. Subsequently, it was learned from her mother that she was closely involved with health issues and wanted to get nursing education. The psychological evaluation of the girl who had normal intellectual capacity and school performance did not reveal any previous family history of psychological disorder. Ptosis was an involuntary symptom of the girl and was not occurring as a result of a deliberate intention and was not seeking concrete benefits. The girl was not faking illness and ptosis was easily improving by inculcation. Because of these observations, the diagnosis of simulation and factitious disorder were excluded and the girl was diagnosed as psychogenic pseudoptosis and was taken under follow up of a child psychiatrist because of conversion disorder and depression. Pyridostigmine was discontinued and sertraline therapy was started. Ptosis did not recur during one-year follow up.

## Discussion

Conversion disorder is defined as a condition causing one or more neurological symptoms that can not be fully explained by a neurological or general medical condition. Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) specifies six diagnostic criteria for conversion disorder: a) The patient has one or more symptoms or defects affecting the senses or voluntary movement that suggest a neurological or general medical disorder, b) The onset or worsening of the symptoms was preceded by conflicts or stressors in the patient's life, c) The symptom is not faked or produced intentionally, d) The symptom cannot be fully explained as the result of a general medical disorder, substance intake, or a behavior related to the patient's culture, e) The symptom is severe enough to interfere with the patient's schooling, employment, or social relationships, or is serious enough to require a medical evaluation, f) The symptom is not limited to pain or sexual dysfunction, does not occur only in the context of somatization disorder, and is not better accounted for by another mental disorder (3).

The prevalence of conversion disorder has been reported to range from 1% to 3% among children. In childhood, conversion disorder occurs most commonly in the 10-15 year age group, with a female to male ratio of 2:1. Obsessional personality, anxiety, depression, and sexual abuse may predispose to the development of conversion disorder (4). Conversion disorder is more common in females, rural populations, lower socioeconomic groups, and those with low educational status.

Patients with conversion disorder may present with motor and sensory symptoms such as paresis/paralysis, loss of hearing or vision, paresthesia/anesthesia, aphasia, psychogenic nonepileptic seizure, movement disorder, inability to walk and syncope (5). Symptoms of conversion disorder related to vision usually include loss of vision, double vision or gaze palsy. In a study of 124 children with somatoform disorders by Bisht et al. (6), conversion disorder was diagnosed in 71 patients (57%). Of the patients with conversion disorder, 52% had fainting attack, 43% had ataxia, 31% had headache, 21% had pseudoseizure whereas one patient had blindness as visual conversion disorder. The case reported here was presented with ptosis as a conversion disorder. Pseudoptosis is an extremely rare conversion disorder. There is a case study of three adults by Hop et al. (7) and an adolescent case by Basheer et al. (8) in the literature. We report here the second adolescent case of pseudoptosis. Ipsilateral eyebrow depression is indicated as a helpful diagnostic sign in distinguishing an organic or a hysteric origin of eyelid ptosis in favor of the latter condition by Keane (9) and Hop et al. (7). The case presented here also demonstrated eyebrow depression as a clue for pseudoptosis.

Previous studies have demonstrated a full recovery in 85%-97% of children presenting with conversion disorder. With early diagnosis and treatment, recovery is achieved between a few days and a few weeks. Good prognostic factors include the rapid and recent onset of symptoms, monosymptomatic manifestation, the absence of an accompanying psychiatric or medical condition and good premorbid adjustment (4). In the case presented here, a favorable response was achieved by antidepressant treatment administered immediately after the first psychiatric assessment and ptosis did not recur. In conclusion, pseudoptosis should be kept in mind particularly in patients with psychiatric disorders after the exclusion of organic lesions.

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