**Case Report**

**Idiopathic palatal palsy**

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**ABSTRACT**

We report a case of isolated palatine paralysis in a 10-year-old boy. This kid presented with complaints of nasal regurgitation of liquids with nasal speech. Brain magnetic resonance imaging was done which was normal. The patient recovered in 10 days without any residual paralysis. Various causes which include infections, trauma, tumor, and brainstem lesions were investigated, but no predisposing factor was found. The patient responded well to conservative management and had been asymptomatic for 3 months.

**Keywords:** Idiopathic, nasal regurgitation, nasal speech, palatine paralysis

**Introduction**

Unilateral acquired isolated palatal paralysis is an uncommon condition usually seen in children. It occurs due to isolated involvement of the pharyngeal branch of the vagus nerve, which supplies motor fibers to muscles of the pharynx and soft palate. It was first described in 1976 by Edin *et al.*¹ The causes include viruses such as varicella-zoster virus,² herpes simplex virus (HSV),³ measles virus,⁴ and Coxsackie A9 virus,⁵ but exact pathogenesis could not be defined.

**Case Report**

We are reporting a 10-year-old child presenting to us with complaints of nasal speech and nasal regurgitation of liquids from the past 3 days which was sudden in onset, nonprogressive, severe, painless in nature. There was no preceding history of throat pain or fever and no specific aggravating factors. The child was immunized till date and not known to have any significant history. Examination of the oral cavity revealed normal looking hard palate, soft palate, tonsils, uvula, and posterior pharyngeal wall. On asking the patient to phonate with open mouth, there was deviation of the uvula to right suggesting weakness on left side of soft palate [Figure 1]. Vocal cords were normal looking and mobile. General physical examination was normal.

Laboratory investigations were within normal limits. Viral causes could not be ruled out due to unavailability. Diffusion-weighted magnetic resonance imaging of the brain revealed no abnormalities [Figure 2].

Patient was started on oral methyl prednisolone 1 mg/kg/day with other supportive measures. Patient noted improvement in 3 days and complete recovery in 10 days. Patient was followed up at 7 days, 14 days, and 3 months. Patient was completely asymptomatic till last follow-up.

**Discussion**

Isolated acquired pharyngeal hemiparalysis has been documented earlier, affecting primarily males in their first or second decade of life. Usually, it presents with nasal voice and nasal escape of fluids on same side. The most common presenting features were hypernasal speech (97%), nasal reflux (73%), and dysphagia (49%).⁶ Immaturity of neural cells in pediatric...
population has been postulated to be among the causes for susceptibility of these cells to virus and ischemia. Isolated palatal palsy is often an idiopathic disease on exclusion of other possible factors such as trauma (adenoidectomy or craniofacial trauma), infection (diphtheria, enteric infection, or poliomyelitis), neuromuscular disorders (Guillain-Barre syndrome or motor neuron disease), cranial vessel pathology (internal carotid artery aneurysm, post angiogram, or vascular insult), and others (syringobulbia, inflammatory disease affecting various brain stem nuclei and tracts, or tumors, especially of the posterior fossa, which usually have a benign course). Definitive viral etiologies for HSV, Coxsackie, Measles, varicella, parvovirus B19, Hepatitis A Virus (HAV), and Epstein-Barr virus have also been established. Thus, to establish the idiopathic nature of this illness requires exhaustive investigation. Understanding the somatotopic organization of the vagus nerve and associated brain nuclei may help explain the isolated palatopharyngeal involvement of this condition.

The prognosis is usually good which responds to steroids. It is documented in literature that palatal palsy is acute in onset, appearing in infancy (96%), predominance in males (79%), recent respiratory infection (35%), and an excellent prognosis for recovery (85%). Our patient improved with 10 days tapering dose of steroids without any residual deficit.

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Conflicts of interest
There are no conflicts of interest.

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