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Case Report

Sudden onset palatal palsy-an iceberg in ENT

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ABSTRACT

We report a case of isolated palatine paralysis in a 15-year-old boy. The patient presented with complaints of nasal regurgitation of liquids with nasal speech. 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.

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, herpes simplex virus (HSV), measles virus, and Coxsackie A9 virus, but exact pathogenesis could not be defined.[2-5]

CASE REPORT

A 15-year-old child presenting to us with complaints of dysphagia since 10 days followed by dysgeusia. Patient also complained of few episodes of nasal regurgitation with liquids. There was previous history of fever, one episode 15 days ago, which was not associated with chills or rigors and subsided with medication. There was no history of facial weakness, nausea, vomiting, weakness in limbs. Patient was admitted in ENT ward for further evaluation. Complete systemic and ENT examination was performed. Patient was found to have deviation of uvula on left side associated with left side vocal cord palsy (Figures 1 and 2). Bilaterally facial nerve was intact and equal. Left side shrugging of shoulders was found to be decreased. Post admission patient developed acute abdominal pain and was evaluated for the same by the physician. Serum samples to rule out viral illnesses were sent and found to be positive for hepatitis E. Magnetic resonance imaging (MRI) brain was normal.

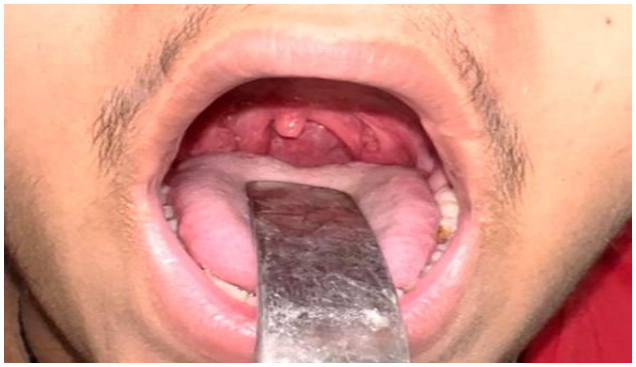

Figure 1: Left sided deviation of uvula.

Patient was started on oral methyl prednisolone 1 mg/kg/day with other supportive treatment. 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 and his clinical findings improved (Figures 3 and 4).

Figure 2: Left vocal fold palsy.

Figure 3: Uvula normal and midline.

Figure 4: Completely treated normal vocal folds, symmetrical.

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).[7,8] Definitive viral etiologies for HSV, coxsackie, measles, varicella, parvovirus B19, hepatitis A virus (HAV), and Epstein-Barr virus have also been established.[9,10] 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.[11]

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%).[12] Our patient improved with 10 days tapering dose of steroids without any residual deficit.

CONCLUSION

Idiopathic palatal palsy is not a common presentation in ENT out patient department and hence vigilant screening of patients with dysphagia and nasal regurgitation can help in better prognosis and outcome of the disease.

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