ISSN: 2755-0281

Journal of Pediatrics Research Reviews & Reports

SCIENTIFIC Research and Community

Case Report

Open Access

Six Years Old Boy with Post Covid-19 Isolated Palatal Paralysis, A Rare Clinical Case

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ABSTRACT

Unilateral acquired isolated palatal paralysis is rarely seen in COVID 19 children with unclear pathogenesis. Post-infectious immune-associated cranial mono-neuropathy is a suggestive theory. Cases due to trauma, tumor, and brainstem lesions have been also reported. The presentation is usually nasal regurgitation and uvular deviation. A case report of acquired isolated palatal palsy in a 6 years old boy is presented below with a good response to treatment.

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Received: November 02, 2025; **Accepted:** November 05, 2025; **Published:** November 14, 2025

Keywords: Paralysis, Vagus, Palatal, COVID-19

Introduction

COVID-19 has demonstrated multiple systemic manifestations beyond the respiratory system. Neurological manifestations also have been documented though they are rare. Palatal paralysis affecting the soft palate and voice is typically associated with vagus nerve dysfunction.

Clinical Case

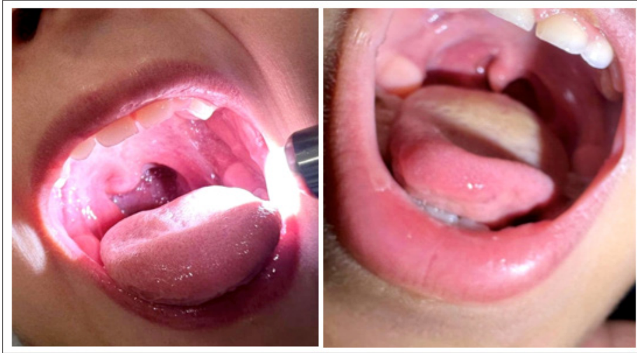
6 years old boy presented with sudden onset of difficulty in swallowing, nasal sounding speech and nasal regurgitation especially for fluids for 2 days prior to admission associated with low grade fever. There was no history of trauma, travelling abroad or recent vaccination but there was a history of coryzal symptoms one week ago. No history of seizures, altered sensorium, squint, facial asymmetry or neck stiffness.

On Examination

The boy was fully conscious, alert and had normal vitals. He has normal respiratory system examination with no drooling. Neurological examination revealed deviation of the uvula to the right side and the sensation over the posterior pharyngeal wall was intact going with lower motor neuron weakness of the pharyngeal branch of vagus nerve. Gag reflex was preserved but weak. Other cranial nerves were intact and there was no other neurological deficits. other systemic examination was unremarkable. His gait was normal. CBC, RFT, LFT and electrolytes were normal. Lumbar puncture was done showing normal cytology, chemistry and cultures. Nasopharyngeal swab was COVID 19 positive. MRI brain also was normal. The child was treated with IV pulse steroid for 5 days followed by a tapering course with gradual improvement.

Discussion

Neurological manifestations in COVID 19 children are variable including headache, stroke, seizures, Guillain-Barré Syndrome and Acute disseminated encephalomyelitis [1]. Involvement of cranial nerves may occur as mono-neuropathy or polyneuritis cranialis, unilaterally or bilaterally, together with or without involvement of peripheral nerves, and with or without CNS involvement [2]. In the literature, most pediatric cranial neuropathies related to COVID-19 involve the facial nerve, followed by abducent and vestibulo-cochlear nerves. Vagus nerve involvement remains exceedingly rare. Isolated palatal palsy was recognized as a result of isolated involvement of the pharyngeal branch of the vagus nerve, which supplies motor fibers to muscles of the pharynx and soft palate [3]. There are two mechanisms that have been proposed related to etiopathogenesis. First, post-infectious cranial mononeuropathy due to an acute infection (mainly viral), as the relative immaturity of neural tissue and an increased prevalence of respiratory and gastrointestinal tract infections that may lead to increased susceptibility in children. Second, ischemia results from a vascular insult to the roots of the IXth and Xth cranial nerves resulting in LM neuropathies that manifest as palatopharyngeal paralysis [4]. Diagnosis of palatal palsy is clinical and relies on recognizing signs such as nasal voice, regurgitation during swallowing, uvular deviation typically away from the affected side and absence of other neurological findings [5]. Serology or PCR to confirm recent COVID 19 infection supports the diagnosis and MRI brainstem is crucial to exclude structural lesions, brainstem stroke, or mass effect, especially when symptoms are unilateral. Management includes: supportive care e.g feeding modification and short courses of high dose corticosteroids to reduce nerve inflammation. Prognosis is generally favorable as most children recover within 2-8 weeks especially if treated early. Persistence beyond 3 months may warrant further evaluation for alternative causes such as lyme disease, autoimmune neuropathy or idiopathic palsy [6].



A: Before Treatment B: After Treatment

Figure 1: Comparison between Uvula Deviation Before and After Treatment

Conclusion

Isolated palatal palsy can occur as a post COVID 19 infection. Pediatrician should be aware of this rare manifestation for early diagnosis and management.

References

1. Brouwer MC, Ascione T, Pagliano P (2020) Neurologic aspects of covid-19: a concise review. Infez Med 28: 42-45.
2. Finsterer J, Scorza FA, Scorza C, Fiorini A (2022) COVID-19 associated cranial nerve neuropathy: A systematic review. Bosn J Basic Med Sci 22: 39-45.
3. Edin M, Sveger T, Tegner H, Tjernström O (1976) Isolated temporary pharyngeal paralysis in childhood. Lancet 1: 1047-1049.
4. Alp H, Tan H, Altunkaynak S, Orbak Z (2005) Idiopathic unilateral paralysis of the palate in childhood. Pediatr Neurol 33: 134-135.
5. Walter V, Nisa L, Leuchter I (2013) Acute isolated velopharyngeal insufficiency in children: Case report and systematic review of the literature. Eur Arch Otorhinolaryngol 270: 1975-1980.
6. Ahmed S, Hussain A, Patel T, Ahmed HR, Shariff MI, et al. (2017) Idiopathic palatal palsy. J Family Med Prim Care 6: 437-438.

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