

Case Report

Elongated uvula: diagnosis and management of a rare condition: case report

Harshitha N.*

Department Of Clinical Pharmacy, Krupanidhi College of Pharmacy, Bangalore, Karnataka, India

Received: 03 October 2024

Revised: 20 November 2024

Accepted: 22 November 2024

*Correspondence:

Dr. Harshitha N.,

E-mail: harshithanarayan1974@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Elongated uvula is a rare condition where the uvula extends into the oropharynx, causing discomfort such as throat irritation, choking during swallowing, and nocturnal dyspnea. This case study discusses a male patient in his 50s presenting with these symptoms, aiming to highlight the diagnostic process and treatment outcomes. The patient presented with throat irritation, choking sensation while swallowing, and nocturnal dyspnea. Clinical examination by a primary care physician revealed an elongated uvula, which was confirmed through CT imaging. Routine investigations, including CT-PNS scanning and polysomnography (PSG), were conducted. The patient underwent a uvulectomy under local anesthesia in an outpatient setting. Postoperative follow-up assessments were conducted to monitor symptom relief and any complications. CT imaging confirmed the diagnosis of an elongated uvula measuring 54 mm. PSG indicated fragmented sleep architecture. The uvulectomy procedure was performed successfully without complications. The patient reported significant relief from throat irritation and improved swallowing function postoperatively. Follow-up at 1 month showed sustained improvement in symptoms. This case highlights the importance of considering uvulectomy for patients with symptomatic elongated uvula. Accurate diagnosis is essential to differentiate it from other conditions like asthma. Uvulectomy is an effective treatment that can significantly improve symptoms and quality of life for appropriately selected patients. Proper patient selection and preoperative evaluation are crucial for achieving optimal outcomes.

Keywords: Obstructive sleep apnoea, Elongated uvula, Uvulectomy, Nocturnal dyspnea, PSG

INTRODUCTION

The uvula is a small, pendulous structure at the posterior margin of the soft palate. It plays a role in speech, swallowing, and maintaining the integrity of the velopharyngeal seal. Anatomical variations such as elongation of the uvula can lead to a range of symptoms, including throat irritation, choking sensations, nocturnal dyspnea, and sleep disturbances. An elongated uvula can contribute to upper airway obstruction, thereby impacting both oropharyngeal and respiratory function.^{1,4}

Studies have highlighted the utility of advanced diagnostic tools, such as computed tomography (CT) and PSG, in

identifying anatomical and functional abnormalities in the upper airway.^{1,6} Management typically involves medical treatment for symptom relief, with surgical interventions like uvulectomy being effective for cases resistant to conservative management.^{2,3} This report presents a case of an elongated uvula successfully managed with uvulectomy, emphasizing the importance of accurate diagnosis and tailored intervention.

CASE REPORT

A male patient in his 50s presented to the outpatient clinic with complaints of throat irritation, choking sensation while swallowing, and nocturnal dyspnea. Upon

examination by the primary care physician, an elongated uvula extending into the oropharynx was observed (Figure 1), correlating with the reported symptoms. Medical management included the prescription of Azithral 500 mg, Dolo 650 mg, and Oan 40 mg to alleviate symptoms. Additionally, the patient was referred to an ENT specialist for further evaluation and management. Upon evaluation by the ENT doctor, the diagnosis of an elongated uvula was confirmed. The patient underwent routine investigations, including CT scanning, which confirmed the diagnosis of an elongated uvula. No co-morbidities were identified during the evaluation.



Figure 1: Elongated uvula.

Investigations

Patient underwent CT-PNS scanning and PSG sleep test, in which CT-PNS technique was axial section with reconstruction. Impression found mild deviation of nasal septum to left side, uvula is elongated extending into oropharynx measures 54 mm length (Figure 2 and 3).

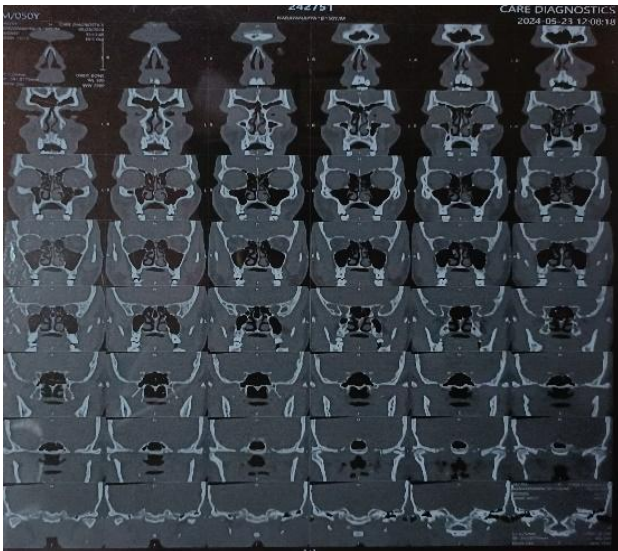


Figure 2: Results of x-ray.

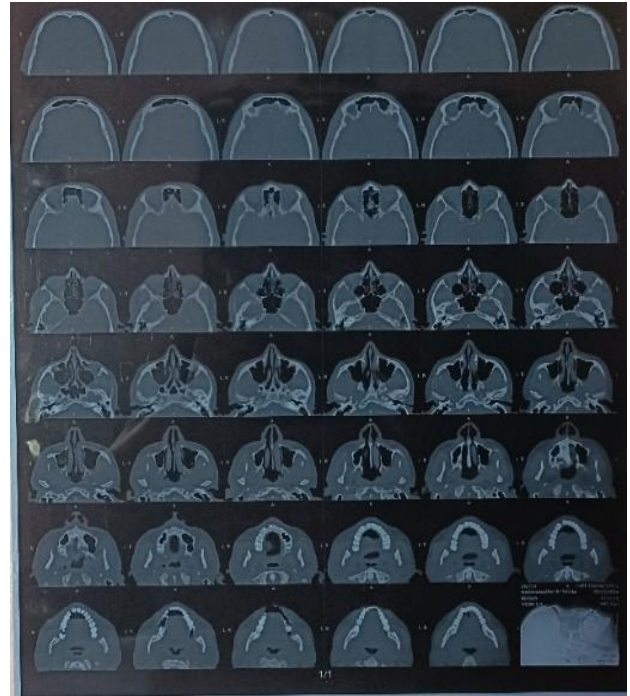


Figure 3: Results of x-ray.

PSG findings were resulted as sleep onset latency: 26.2 minutes (normal 10 to 20 minutes). REM onset latency: 163.0 minutes (80-120 minutes) sleep efficiency: 84.6% (Normal >85%). Sleep architecture was fragmented with stage N1: 0.8 (2-5%), stage N2: 61.7 (45-50%), stage N3: 25.7% (20-25%), stage REM: 11.8% (20-25%). arousal index: 31.4. (Figure 4 and 5).

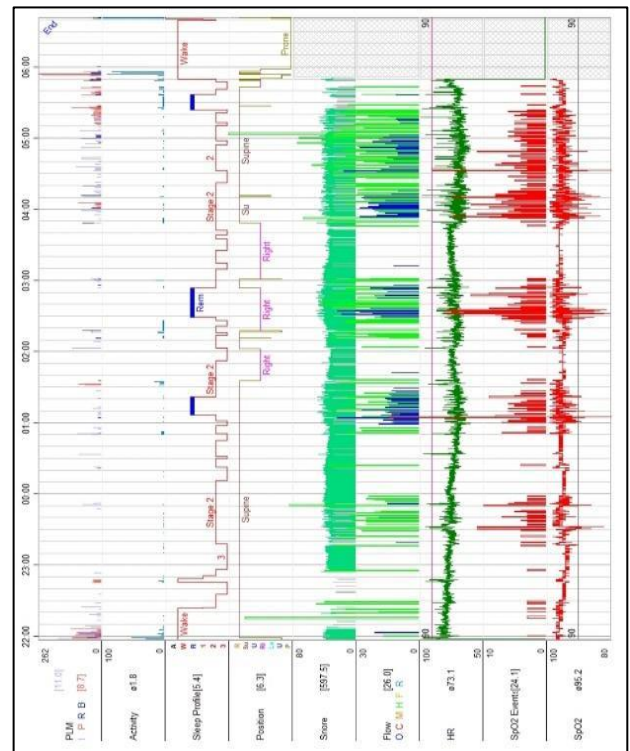


Figure 4: Results of sleep test.

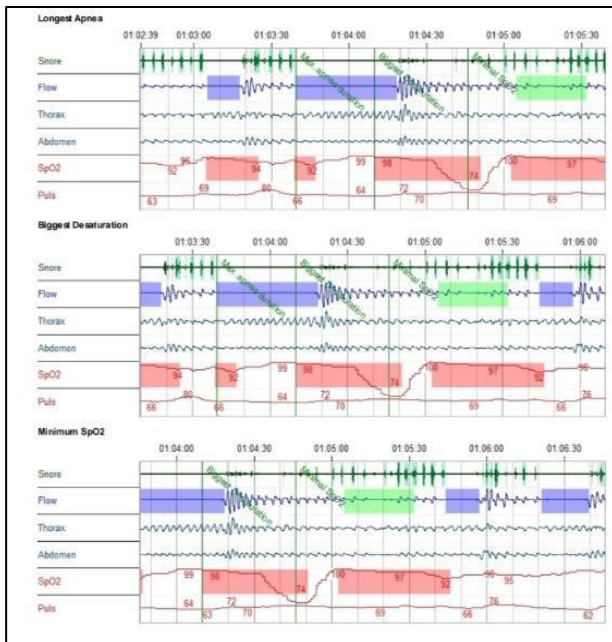


Figure 5: Results of sleep test.

Differential diagnosis

To further assess the condition, a CT scan of the throat and airway was performed. The imaging revealed an elongated uvula, contributing to the patient's symptoms. Based on the clinical presentation and imaging findings, the patient was diagnosed with an elongated uvula.

Treatment

After careful consideration and discussion with the patient, a decision was made to proceed with uvulectomy to relieve the symptoms and improve the patient's quality of life. The surgical procedure was performed under local anesthesia in an outpatient setting. The elongated portion of the uvula was excised using sharp dissection, and hemostasis was achieved with electrocautery (Figure 6). The patient tolerated the procedure well.



Figure 6: Removed uvula.

Outcome follow-up

Reported relief from throat irritation and improved swallowing function postoperatively. Follow-up assessments at 1 month revealed sustained improvement in symptoms without any complications. Need to be followed up for 6 months.

DISCUSSION

This case highlights the significant impact of an elongated uvula on upper airway function and overall quality of life. Anatomical abnormalities of the uvula, such as elongation, can result in symptoms including throat irritation, choking during swallowing, and nocturnal dyspnea. These symptoms are often misdiagnosed as gastroesophageal reflux disease (GERD) or sleep apnea, delaying effective treatment.^{1,4,6} Early recognition of uvular elongation as a potential cause of such symptoms is crucial to avoid progression to more severe complications like obstructive sleep apnea or chronic cough.⁵

Advanced diagnostic tools played a vital role in this case. CT imaging accurately measured the elongated uvula at 54 mm, correlating the anatomical abnormality with clinical symptoms. Additionally, PSG findings revealed disturbed sleep architecture, prolonged REM latency, and an elevated arousal index, underscoring the functional impact of the elongated uvula.^{1,7} These results highlight the importance of combining imaging and sleep studies for a comprehensive evaluation.

Uvulectomy provided significant symptomatic relief, addressing both the anatomical and functional issues. The procedure is minimally invasive, effective, and associated with a low risk of complications. Postoperative improvements in swallowing and reduced throat irritation align with existing literature, which supports uvulectomy as the treatment of choice for uvular elongation when medical management fails.²⁻⁴ Early surgical intervention, as seen in this case, can enhance patient outcomes and prevent future airway complications.

This case emphasizes the need for a multidisciplinary approach in diagnosing and managing uvular elongation. It highlights the utility of advanced diagnostics and the effectiveness of tailored surgical interventions. Future research could explore non-surgical alternatives and long-term outcomes following uvulectomy, contributing to better patient care in similar cases.

CONCLUSION

This case underscores the clinical significance of an elongated uvula as a cause of upper airway obstruction, throat irritation, and sleep disturbances. Advanced diagnostic tools, such as CT imaging and PSG, were instrumental in confirming the diagnosis and assessing the functional impact of the anatomical abnormality. Uvulectomy proved to be an effective and minimally

invasive treatment, providing significant symptomatic relief and improving the patient's quality of life.

Early recognition and timely intervention are crucial in managing elongated uvula to prevent complications such as obstructive sleep apnea and chronic cough. This case highlights the importance of a multidisciplinary approach, combining clinical evaluation, imaging, and sleep studies, to optimize diagnosis and treatment outcomes. Tailored surgical interventions, like uvulectomy, offer a definitive solution, especially in cases where conservative management fails.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Paliwal R, Patel S, Patel P, Soni H. Elongated uvula and diagnostic utility of spirometry in upper airway obstruction. *Lung India*. 2010;27(1):30-2.
2. Leo HHC, Deane H. Treatment of an enlarged uvula. *Brit J Oral Maxillofacial Surg*. 2008;46:490-91.
3. Surajkumar, Uvulectomy: symptomatic relief for chronic irritating cough and obstructive apnoea syndrome in long uvula. *JCRP*. 2014;2(1):9-11.
4. Shindo JVTC, Bellini JMP, De Araújo Sale P, Batista BMBC, Bigueti CC, Andreo JC, et al. Anatomical Variations of the Uvula: Considerations based on Two Cases. *J Morphol Sci*. 2020;37:102-4.
5. Greenberg M, Glick M. *Burket's Oral Medicine. Diagnosis and Treatment*. 10th ed. BC Decker. 2003.
6. Neville B, Damm D, Allen C. *Oral and Maxillofacial Pathology*. 2nd ed. Elsevier; 2008.
7. Welling A. Enlarged uvula (Quincke's Oedema)--a side effect of inhaled cocaine? -A case study and review of the literature. *Int Emerg Nurs*. 2008;16(3):207-10.
8. Kashyap SA, Patterson AR, Loukota RA, Kelly G. Tapia's syndrome after repair of a fractured mandible. *Br J Oral Maxillofac Surg*. 2010;48(1):53-4.
9. Brimacombe J, Clarke G, Keller C. Lingual nerve injury associated with the ProSeal laryngeal mask airway: a case report and review of the literature. *Br J Anaesth*. 2005;95(3):420-3.
10. Mallat A, Roberson J, Brock-Utne JG. Preoperative marijuana inhalation--an airway concern. *Can J Anaesth* 1996;43(7):691-3.

Cite this article as: Harshitha N. Elongated uvula: diagnosis and management of a rare condition: case report. *Int J Res Med Sci* 2025;13:404-7.