

Uncertainty to Identify the Type of Mallampati in A Patient without A Uvula

Kavin Adhitya, Krishna Prasad. T, Preetha Tamilchelvan, Soundarya Priyadharsini. K.

Shri Sathya Sai Medical College and RI, Ammapettai, Kanchipuram Dt-603108. India.

***Corresponding Author:** Krishna Prasad T, Professor, Dept of Anaesthesiology, Shri Sathya Sai Medical College and RI, Ammapettai, Deemed University, Kanchipuram Dt- 603108. India.

Received date: June 12, 2024; **Accepted date:** June 19, 2024; **Published date:** July 01, 2024

Citation: Kavin Adhitya, Krishna Prasad. T, Preetha Tamilchelvan, Soundarya Priyadharsini. K. (2024), Uncertainty to Identify the Type of Mallampati in A Patient without A Uvula, *J Clinical Research and Reports*, 16(2); DOI:10.31579/2690-1919/387

Copyright: © 2024, Krishna Prasad T. K. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

Background:

The uvula is a band of muscle fibers, glands, and connective tissue, it is believed that the uvula acts as the palatopharyngeal arch's main support during swallowing. Congenital and acquired conditions can be used as broad categories to describe the causes of missing uvulas. In the general population, congenital uvula absence is extremely uncommon. Apert syndrome, anhidrotic ectodermal dysplasia, cerebrocostomandibular syndrome, and hyperimmunoglobulin E syndrome are a few inherited diseases that may be associated with birth uvula absence. Following surgery, such as uvulopalatopharyngoplasty for obstructive sleep apnea, acquired causes of absent uvula may arise. The specifics of uvulectomy in Africa is done as a ritual.

Conclusion:

The Mallampati classification was unclear due to the absence of uvula. But since the tonsillar pillars and fauces were both visible, we classified the patient as MMP Class I. The cause of absent uvula, a rare condition that puts the patient at risk for difficult breathing, must be determined because it may coexist with other genetic abnormalities. Additionally, it results in a great deal of uncertainty when using the MMP classification for airway assessment. Thus to assess the difficulty of the airway, focus must be done on visualising other oropharyngeal structures, particularly tonsillar pillars and fauces in patients where uvula is missing or absent congenitally or due to other causes.

Keywords: uvula; congenital absence; congenital abnormality, mallampati classification

Introduction:

The uvula is a band of muscle fibers, glands, and connective tissue, it is believed that the uvula acts as the palatopharyngeal arch's main support during swallowing. Congenital and acquired conditions can be used as broad categories to describe the causes of missing uvulas. In the general population, congenital uvula absence is extremely uncommon. By preventing pressure changes brought on by coughing or sneezing between the mouth and oral section of the pharynx, it prevents the soft palate from being forced into the nasopharynx. The palatine shelves fuse to create it between the seventh and twelfth weeks of intrauterine life. The uvula, which receives sensory and motor innervation from the glossopharyngeal nerve (cranial nerve IX) and motor innervation from the vagus nerve (cranial nerve X), also contributes significantly to the expression of the gag reflex⁽¹⁾. Apert syndrome, anhidrotic ectodermal dysplasia, cerebrocostomandibular syndrome, and hyperimmunoglobulin E syndrome are a few inherited diseases that may be associated with birth uvula absence. The fusion of the cervical vertebra and cleft palate is associated with Alpert syndrome, anhidrotic ectodermal dysplasia is associated with rheumatoid arthritis, and glossotoposis is associated with

hyperimmunoglobulin E syndrome^(2,3). Following surgery, such as uvulopalatopharyngoplasty for obstructive sleep apnea, acquired causes of absent uvula may arise. The specifics of uvulectomy in Africa may vary, but in general, a stick or tongue depressor was placed under the uvula before it was cut with a curved, sickle-shaped knife. Some variations include cutting the uvula with a hot knife, using a snare made of twisted horsehair, or holding the uvula between the tines of a reed fork (Morocco) (Egypt).⁽⁴⁾

Case Description:

A 39-year-old obese female patient with BMI 35.2 kg/m² underwent Pre-operative examination for posterior chest wall lipoma. The patient had no co-morbid conditions, and all of her routine tests came back normal. Mouth opening, neck rotation, and movements were all normal. The lower right molar was missing when modified mallampati (MMP) Class was used to examine the oral cavity, but I was able to see the fauces, tonsillar pillars, soft and hard palate as seen in figure 1. The patient spoke clearly did not have stuttering nor did she stumble during the conversation and

did not give any indication that she had snoring or frequent respiratory tract infections. The patient had denied any sort of oral surgery including uvulectomy. The patient was approved for Class II of the American Society of Anesthesiologists (obesity). In light of the potential co-existence of other airway anomalies, the patient was followed up regularly. Securing the airway for general anaesthesia and airway management under went without any struggle.

Discussion:

Since the uvula occupies the highest position in the soft palate, it is thought to be crucial to Mallampati classification. There were numerous circumstances where the uvula's absence could interfere with its regular operations. Because absent uvulas were extremely uncommon, little has been documentation about them.

For the pre-operative evaluation of the airway, the MMP classification is frequently used. From MMP Class I to III, The soft palate, fauces, pillars, and uvula are all present in Mallampati Class I. The soft palate, fauces, and uvula are also present in Class II. In Class III, the uvula base and soft palate are present. The uvula is a significant landmark structure on which the classification is based.

Conclusion:

Due to the absence of the uvula in this case, the Mallampati classification was unclear, but since the tonsillar pillars and fauces were both visible, we classified the patient as MMP Class I. The cause of absent uvula, a rare condition that puts the patient at risk for difficult breathing, must be determined because it may coexist with other genetic abnormalities. Additionally, it results in a great deal of uncertainty when using the MMP

classification for airway assessment. Thus to assess the difficulty of the airway, focus must be done on visualising other oropharyngeal structures, particularly tonsillar pillars and fauces in patients where uvula is missing or absent congenitally or due to other causes.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given her consent for her images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

References:

1. Back GW, Nadig S, Uppal S, Coatesworth AP. (2004), Why do we have a uvula? literature review and a new theory. Clin Otolaryngol Allied Sci; 29:689-93
2. Jorgenson RJ, Shapiro SD, Salinas CF, Levin LS. (1982), Intraoral findings and anomalies in neonates. Pediatrics; 69:577-82.
3. Chipeta J, Banda J, Mbinga M, Wa-Somwe S. (2009), Absent uvula and thrombocytopenia in an African infant with Job's syndrome: Case report and review of literature. J Infect Dis Immun; 1:1-5.
4. Hunter L. (1995), Uvulectomy-the making of a ritual. South African Medical Journal ;85(9).



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here: [Submit Manuscript](#)

DOI:10.31579/2690-1919/387

Ready to submit your research? Choose Auctores and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more <https://www.auctoresonline.org/journals/journal-of-clinical-research-and-reports>

