Uvulectomy; Symptomatic relief for chronic irritating cough and obstructive apnoea syndrome in long uvula

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ABSTRACT
An elongated uvula can flop down and touch various structures in upper airway in the oropharyngeal junction and cause mechanical irritation. Here we present a case report of a patient with long uvula with respiratory tract obstruction leading to chronic cough and obstructive apnoea syndrome (OSA), in which uvulectomy was carried out for symptomatic relief.

Key words: chronic cough, elongated uvula, obstructive apnoea syndrome, uvulectomy.

INTRODUCTION
The uvula is seen anatomically in relation to soft palate and are essential structures during functional movements of oropharyngeal isthmus. Long and floppy uvulas are seen rarely in population and if present, may be associated with problems such as upper airflow obstruction or irritation. Obstructive sleep apnoea and chronic cough are two main diseases in which a long floppy uvula may be seen as a predisposing factor. Uvulectomies are main stay of surgical treatment in which reduction of uvual and palatal structures are carried out. In Africa, uvulectomies were carried out as ancient ritual especially in muslim community as common as circumcision.

CASE REPORT
A 26-year-old male patient was reported to our department with complaint of recurrent cough, respiratory apnoea and a feeling of foreign body on the tongue. This distressing cough usually ended in vomiting with variable symptomatic relief. The coughing episodes were mainly observed during the daytime and often precipitated by a semisolid or solid diet. There was no history of cold, temperature, or breathlessness associated with it. On intraoral examination, an elongated uvula of approximately 5cm was seen clinically sitting on the posterior dorsal surface of the tongue. Routine blood investigations were carried out to rule out other relevant medical conditions. A surgical treatment of uvuloplasty was planned to remove the respiratory obstruction and to obtain symptomatic relief. Under General anaesthesia surgical excision was done and a size of 3.5cm uvula was resected out, leaving about 1.5cm in position. Postoperatively patient showed excellent healing and less discomfort.

The uvula is a soft tissue appendage that is important in producing a tight seal of oropharyngeal region during movements like speech or mastication. Anatomically it is formed by the fusion of two halves of soft palate. These structures are highly complaint and collapsible during sleep and functional movements of pharynx. Elongated uvulas are quite rare entity in literatures. Such a condition usually flop down and touches various structures of upper respiratory tract regions which may include posterior pharyngeal wall, epiglottis and vocal cords. This may lead to irritation of these structures causing a number of ailments in upper airway region.

One of the most important complication is obstructive sleep apnoea syndrome (OSA) in which a person fails to tolerate a positive airway pressure therapy. Deegan PC and Zonata et al have found that long uvula is one of the predisposing factors in OSA. Another commonly seen condition is chronic cough. Cough is actually a protective reflex mechanism of human body in order to prevent accidental aspiration of foreign bodies in to the respiratory region. But it become distressing when this protective reflex become a persistant cough due to chronic irritation of upper airway by long and floppy uvula.

Treatment for this condition mainly aims in removal of irritation of upper airway there by maintaining a positive airway pressure therapy. Historically uvulectomies were practiced among the Igbo ethnical races of Nigeria. Ethnomedicine refers to the study of traditional cultural medical practices which yields ample evidence that uvulectomies were ancient surgical practices among traditional healers for diseases like chronic tonsillitis, pharyngitis, laryngitis etc. Surgical interventions are required for proper alignment of long uvulas which includes uvulectomy, uvulopalatopharyngoplasty, laser-assisted uvulopalatoplasty,
and RF of the soft palate with adenotonsillectomy. Uvulapalatopharyngoplasty (UPPP) aims to modify the retropalatal airway by uvual excision and rearrangement of anterior and posterior pharyngeal pillars. A success rate of 40-50% has been seen in literatures for this procedure but they may be performed with caution because of its associated complications like velopharyngeal insufficiency, dysphagia, naso-pharyngeal stenosis and persistent dryness. Laser assisted uvulopalatoplasty (LAUP) is a new technique introduced in 1990 in order to shorten and tighten uvula and palate through a series of carbon dioxide laser incisions and vapourizations. Concerns regarding the persistence of postoperative edema of upper airway has made this technique a less popular one.11,12,13,14 Radiofrequency ablation has been tried with varying success in case of a floppy uvula but their main advantage lies in its precision and safety.15 As long uvulas are not a pathological entity by itself, but only an anatomical abnormality which may cause patient discomfort, surgical treatment of this condition mainly aims to maintain airway and removal of other associated ailments. Being a dentist, we can play an important role in prior identification and early referral of this condition during routine intraoral examination.

REFERENCES
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