TRADITIONAL UVULECTOMY: ORIGIN, PERCEPTION, BURDEN AND STRATEGIES OF PREVENTION

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ABSTRACT Traditional uvulectomy is a procedure involving partial or total removal of uvula by traditional practitioners. Uvulectomy by traditional practitioners in Africa has been an age-long practice. The procedure persists in the developing countries probably because of low socioeconomic status and non-formal educational level. There are divergent views as to the reason for uvulectomy as well as its overall benefit. There have been reported cases of complications after the procedure with a subsequent increase in morbidity and mortality. The goal of this paper was to examine the origin of traditional uvulectomy, the perception of people, its burden and strategies of its prevention.

KEYWORDS Traditional, uvulectomy, burden, prevention.

Introduction

Traditional uvulectomy is the removal of uvula by traditional practitioners. Usually, it is carried out by traditional healers or by lay individuals who double as barbers performing their acts with a sickle knife and other unsterilized instruments [1,2]. It is hardly performed in hospital setting [3] except in procedures like uvulopalatoplasty, laser-assisted uvulopalatoplasty, and RF of the soft palate with adenotonsillectomy [4]. The procedure can be viewed in two ways, firstly as part of the western medicine to address condition like snoring which may be considered a medically acceptable treatment and secondly as part of the traditional medicine to cure illness such as a sore throat, which is considered extremely dangerous [5]. Traditional uvulectomy is a common practice among some tribes especially in the northern part of Nigeria, and it is usually associated with traditional beliefs as local customs and practice [6]. Apart from Nigeria, It has been established that the procedure is widely practiced in some African countries like Kenya, Sierra Leone, Tanzania, Ethiopia, South Africa [1,7-12]. Beyond African, Israel, Saudi Arabia, and some Middle Eastern countries are also involved in the practice [1,2,13]. The procedure persists in the developing countries probably because of low socioeconomic status and non-formal educational level [14]. The reason given for uvulectomy varies and includes fear of upper airway obstruction from an enlarged uvula leading to instant death. It was also seen as the source of throat problems in childhood such as feeding difficulty and hoarseness [3]. Other reasons are frequent throat infections, failure to thrive, frequent fever, rejections of feeds, recurrent vomiting and chronic cough [3,14]. Usually, it used to be removed before the seventh day after the birth of a baby as the religion dictates [3,4,14,15]. In the Hausa – speaking communities of Nigeria and Niger, traditional uvulectomy is performed as part of a Muslim naming ceremony on the seventh day after birth. This ritual was thought to prevent death from swelling of the uvula, which could burst and kill the neonate.

The uvula is seen anatomically abort the soft palate and is essential structures during functional movements of oropharyngeal isthmus [16]. It is a midline conical projection from the free border of the soft palate. Usually, it is seen as a small piece of tissue that hangs in the back of the mouth when looking at the throat with the mouth open [3]. It is formed from soft palate by the fusion of the two parts of the uvula in the midline during the 11th week. It contains the muscle called musculus uvulae. This muscle tenses and shortens the uvula.

Arterial supply is mainly from a palatine branch of the ascending pharyngeal artery, the ascending palatine and descending palatine arteries. Venous drainage is to the pterygoid plexus and thence, through the deep facial vein to the anterior facial vein and into the internal jugular vein. The lymphatic drainage

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is partly by way of retropharyngeal nodes but chiefly direct to the upper deep cervical group of nodes. The lesser palatine and glossopharyngeal nerves innervate the mucous membrane while the muscles are supplied by the pharyngeal plexus (a glossopharyngeal/vagal complex) [17, 18,19].

HISTORY

The origin of uvulectomy dated back as far as (460-355 BC) when Hippocrates recommended seizing an inflamed uvula with the fingers, pressing it against the palate and cutting off the end.

During that period uvulectomies were performed either with a scalpel or by dipping of the uvula into burning caustics held in a spoon-shaped device.

The practice of uvulectomy was said to have died out in Europe after the 11th century, though there was one brief flourish of popularity, mainly in England and France during the 19th century when James Yearly introduced and advocated uvulectomy as a cure for stuttering [15].

Furthermore, Imperato [20] asserts that the procedures performed by Hausa barber-surgeons are derived from early Arabic medicine.

This ritualistic uvulectomy are usually performed by an apprenticed barber-surgeon, who identifies a diseased uvula by looking for a finger imprint after pressing on the child's forehead or by identifying a swollen, red, white or long uvula. The barber then recites verses from the Koran and an inaudible prayer that is thought to protect the child and to guide the barber. The uvula is completely or partially excised using a sickle-shaped knife. Hemostasis is obtained with herbal providers. The uvula is then placed on the forehead of the child and later hangs on the wall in his or her home. Other variations of the practice include using a reed fork in Morocco, twisted strands of horsehair in Ethiopia and a hot knife in Egypt [21,22,23].

FUNCTIONS OF UVULA [24,25]

1. It influences the tone of voice.
2. It has an immunological function.
3. Moistening of the oropharyngeal mucosa, it secret large amount of thin serous saliva which bathes the oropharyngeal mucosa.
4. In conjunction with the soft palate, it closes the nasopharynx, therefore, preventing aspiration/regurgitation of food or water through the nose.

PROBLEMS/DISEASES ASSOCIATED WITH UVULA

The following are common problems or diseases associated with the uvula.

1. Elongated uvula
2. Uvulitis
3. Bifid/cleft uvula

PROBLEMS ASSOCIATED WITH LONG AND FLOPPY UVULA ARE AS FOLLOWS [16]

1. Obstructive sleep apnoea
2. A chronic cough
3. Persistent foreign body sensation in the throat
4. Creating a sensation of gaggling, chocking, tickling

PROBLEM ASSOCIATED WITH INFECTED UVULA

Inflammation of uvula is called uvulitis. It can be caused by drinking of hot or very cold drinks, viral or bacterial infection, canker sores on the uvula, smoking of cigarettes, alcohol intake, certain medical procedures like gastroscopy, laryngoscopy which may irritate uvula and reflux oesophagitis [26]. Bacterial organisms present in the mouth take advantage of this situation and cause infection and inflammation of uvula. There may be associated fever and redness of the uvula. The problems of uvulitis can be as follows:

1. It can rupture leading to aspiration
2. Obstructive sleep apnoea
3. Dysphagia
4. Dysphasia

PROBLEM ASSOCIATED WITH BIFID/CLEFT UVULA

In moderate to severe bifid/cleft uvula with the involvement of palate (SUBMUCOUS CLEFT), the following problem may emanate:

1. Rhinolalia aperta (hypernasal speech)
2. Velopharyngeal insufficiency
3. Nasal regurgitation
4. Middle ear infections

COMPLICATIONS OF TRADITIONAL UVULECTOMY

Uvulectomy by traditional practitioners in Africa has been an age-long practice. However, despite the cultural and health significance of the practice, the procedure has often been discouraged owing to the complications resulting from traditional uvulectomy. Apart from the fact that the instruments used for the procedure were not sterilized and reports had it that these instruments are used on several patients in the same session it has been described as unwholesome, unscientific, unsupervised practice and potentially dangerous which can lead to complications such as haemorrhage, anemia, septicaemia, tetanus, risk of the Human Immunodeficiency Virus (HIV) infection, hepatitis, neck infection and death [3,22,23,27-30].

Anaemia is usually from post-uvulectomy bleeding and sepsis from infections [3,30].

Others are Pharyngeal dryness [25], the passage of the cut piece of uvula further down the respiratory tract (aspiration) [4]. The newer complications reported recently includes haemorrhage from tonsils and cavernous sinus thrombosis [10,31]. Elyajouri et al. [32] reported a case of Grisel's syndrome in an eight-month-old baby following a traditional uvulectomy. The perceptions of disease causation in children attributed to the uvula were remarkably influenced by lack of formal education and poverty [14]. Some of the patients after the procedure required hospital admission for various complications [4,30]. When the procedure is carried out in the absence of adenoid, it may lead to velopharyngeal incompetence with subsequent nasal regurgitation of meals [30]. Accidental injury to

the retropharyngeal space can occur during traditional uvulectomy which may subsequently cause retropharyngeal abscess [33]. Adoga et al. [30] reported that over half of their patients still had the presence of the symptoms which ab initio was indicated traditional uvulectomy. In such situation traditional uvulectomy mighty have been done for other etiological factors responsible for pharyngeal symptoms. Olaosun et al. [34] reported a case of death in 5-year-old girl with leukaemia that had traditional uvulectomy done due to a sore throat. Also, reports of traditional uvulectomy performed on patients with recurrent tonsillitis who presented with throat symptoms were made [33].

Apart from significant complications noted above, individuals that had traditional uvulectomy done may experience pain for many days after the procedure, change in their voice, disturbance in sleep pattern and regurgitation of food from the nostril [11,33].

OBSERVATIONS:

1. Cultural believes still has much influence on the practice of traditional uvulectomy. They believe that uvula if not cut could allow children to develop childhood diseases.

2. Studies had shown that the practice of traditional uvulectomy remains the cultural practice of many communities.

3. The procedure did not show any clinical benefit, and such practices may lead to morbidities and mortalities.

4. Traditional uvulectomy is common in many countries, usually done for people with a sore throat, which in itself is a prevalent symptom.

RECOMMENDATIONS/STRATEGIES

A. TO THE SOCIETY/COMMUNITY

1. Health education program at all levels of society should be embarked upon in which they are to adequately educated on the dangers of this practice.

2. Emergency care providers should advocate for legal and public health intervention to eliminate the dangerous practice.

3. There is a need for health education of the general public so as to prevent the various complications of traditional uvulectomy.

4. The community should be educated on the adverse effects of the traditional uvulectomy.

5. They should take their children to Medical Practitioners anytime their children is having a throat problem. Difficult cases should be referred.

6. Awareness should be created, and community members should be discouraged from believes that the presence of uvula can aggravate childhood disease.

B. TO THE TRADITIONAL PRACTITIONER

1. There is need to educate the traditional practitioners' on the dangers of the procedure of traditional uvulectomy.

2. Risks of transmission of infection from using unsterilized instruments should be made known to them.

C. TO THE GOVERNMENT

1. School health programs should be encouraged in all schools

2. Traditional uvulectomy should be discouraged and laws promulgated to stop it

3. Increase level of awareness inform of advocacy at various level of government (i.e at Local, State and Federal)

4. To increase evenly distribution of specialists in this field (i.e ENT Surgeons)

5. Strengthening the Primary and Secondary levels of health care by employing more health personnel

6. Universal health coverage should be advocated at all levels.

D. TO HEALTH INSTITUTION

1. Emphasis on follow up cases should be made for early recognition and prompt treatment of speech problems and nasal regurgitation from velopharyngeal incompetence.

2. Each institution should have a robust outreach program to create awareness to people at grassroots.

3. Health institution has a role to play in sensitisation of the government on the need to continue public education on the harmful effects of traditional uvulectomy.

4. Emergency care providers should advocate for legal and public health intervention to eliminate the dangerous practice

5. Training of community health workers first aids and to stress the need to make an early referral of difficulty throat problem

CONCLUSION

Traditional uvulectomy still has some cultural influence. It is an unwholesome, unscientific and potentially dangerous procedure that can result in severe morbidity and mortality.

COMPETING INTERESTS

The authors declare that they have no competing interests.

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