

CASE REPORT

Management of lingual tonsillar hypertrophy using microdebrider

Lingual tonsil hipertrofisinde mikrodebrider kullanımı

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A female patient presented with globus sensation, chronic cough, and choking attacks. Endoscopic examination showed lingual tonsillar hypertrophy. Partial lingual tonsillectomy was planned. Surgery was performed under local anesthesia in the sitting position, with the use of the microdebrider under the guidance of an endoscope. The operation was accomplished with minimal bleeding. Surgery was very comfortable and easy for both the patient and the surgeon. The microdebrider was found to be effective and useful in the management of lingual tonsillar hypertrophy.

Key Words: Debridement/instrumentation; hypertrophy; tonsil/pathology; tonsillectomy/methods.

Globus hissi, kronik öksürük ve boğulma nöbetleri yakınmalarıyla başvuran bir kadın hastaya yapılan endoskopik muayenede lingual tonsilin ileri derecede hipertrofik olduğu saptandı. Hastaya kısmi lingual tonsillektomi planlandı. Girişim, hasta oturur vaziyette iken, lokal anestezi altında, endoskop aracılığıyla mikrodebrider kullanılarak yapıldı. İşlem çok hafif kanama ile gerçekleştirildi. Girişimin hem cerrah hem de hasta açısından rahat ve konforlu olduğu gözlemlendi. Kısmi lingual tonsillektomide mikrodebrider kullanımı etkili ve yararlı bulundu.

Anahtar Sözcükler: Debridman/enstrümantasyon; hipertrofi; tonsil/patoloji; tonsillektomi/yöntem.

Lingual tonsils, a normal component of Waldeyer's ring, consist of lymphoid tissue located at the base of the tongue. Hypertrophy of the lingual tonsil has occasionally been reported in children, but most often occurs in adults, particularly in atopic individuals.^[1,2] Its etiology remains unclear. However, it is speculated to arise from a compensatory mechanism following removal of the palatine tonsils or secondary to a chronic, low-grade infection of the tonsils.^[1]

Cryosurgery, laser, electrocautery, or radiofrequency have been reported to be helpful in the surgical management of lingual tonsillar hypertrophy (LTH).^[3,4]

The microdebrider is a powered shaving device with continuous suction, often used in otolaryngology practice, mostly in endoscopic sinus surgery, adenoidectomy, and partial tonsillectomy. The microdebrider is a safe tool, it removes only the soft tissues while preserving the vital parts.

We presented a female patient with LTH, whose lingual hypertrophic tonsillar tissue was excised with the microdebrider.

CASE REPORT

A female patient presented with globus sensation, chronic cough, and choking attacks to our ENT outpatient clinic. Previously, she sought treatment and

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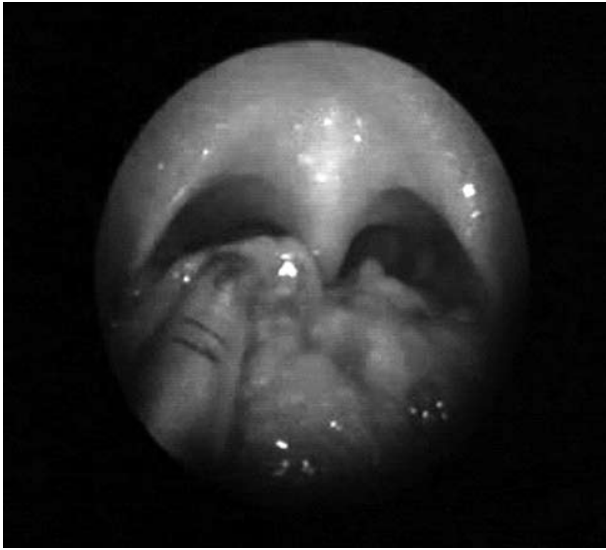


Fig. 1. The use of the microdebrider in lingual tonsillar hypertrophy.

was prescribed various antibiotics and anti-inflammatory drugs, which did not relieve her complaints. Endoscopic examination of the airways showed LTH. Partial lingual tonsillectomy was planned. Surgery was performed under local anesthesia with the patient sitting in a chair. A 45° microdebrider (Xomed XPS™ 2000 Power System, Xomed, Jacksonville, FL, USA) at 1500 rpm was used. For visualization of the surgical field, a 30° endoscope (Karl Storz, Tuttlingen, Germany) was used (Fig. 1). The operation was accomplished with minimal bleeding. During surgery, the microdebrider was found to be comfortable for both the performing surgeon and the patient.

DISCUSSION

The term lingual tonsil refers to a discrete mass of lymphoid tissue located at the base of the tongue.^[5] Although there is considerable variation in the size and disposition of this tissue, when enlarged, two lateral masses develop symmetrically on either side of the midline.

Clinically, lingual tonsillar hypertrophy is not detectable on routine preoperative physical examination.^[6] Although many patients are asymptomatic, others may complain of globus sensation, alteration of voice, chronic cough, choking or dyspnea. Acute inflammation is characterized by sore throat, cough, dysphagia, fever, and leukocytosis. Associated complications include airway obstruction, infection, abscess formation, obstructive sleep apnea, and recurrent adult epiglottitis.^[7]

The major advantage of the microdebrider is that it allows the surgeon to remove target tissue precisely without any damage to the surrounding structures. This results in less scarring and better healing. The microdebrider enables the removal of blood and tissue instantly, so that the surgical field is better visualized.

Although cryosurgery, laser, electrocautery, or radiofrequency are used in the management of LTH, the microdebrider is also a good alternative. It allowed us to perform the operation under local anesthesia, in a short time and in a comfortable manner.

The microdebrider is successfully used in a wide variety of otolaryngological operations including endoscopic sinus surgery, management of choanal atresia, adenoidectomies, and partial tonsillectomies. Thornton et al.^[8] reported transnasal resection of juvenile angiofibroma with the use of the microdebrider. It is also used in the management of early-stage laryngeal cancers.^[9] In cases with laryngomalacia, the microdebrider can be an alternative to cold knife excision and carbon dioxide laser when surgical intervention such as supraglottoplasty is required. Zalzal and Collins^[10] reported the use of the microdebrider in five cases for tissue excision during supraglottoplasty. They used the microdebrider to trim the aryepiglottic folds and/or redundant arytenoid mucosa in all cases, resulting in complete resolution of stridor, without complications such as aspiration or supraglottic stenosis, or revision surgery. The microdebrider has also been reported to be useful in the management of subglottic hemangioma, recurrent respiratory papilloma, Reinke's edema, and rhinophyma.^[11-14] It was also found to be very helpful in transcervical removal of gigantic intrathoracic thyroid tissue.^[15] In rhinoplasty, it provides an excellent approach to the bony dorsum, allowing complete sculpting under direct vision, easy visualization, and permitting precise contouring.^[16]

In our case, the microdebrider was found to be useful in the management of lingual tonsillar hypertrophy.

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