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LEMBOT MUSKULOMUKOZALE BUKALE NË DEFEKTET E QIELLZËS

Jakup Vrioni*, Renato Isufi*

*Departamenti i Kirurgjisë Orale dhe Maksilofaciale, QSUT "Nënë Tereza"

Abstrakt

Lembot muskulomukozale buccinatore janë lembo të modelit aksial që janë të përshtatshëm për rindërtimin e defekteve të indeve të buta orale me madhësi mesatare; janë të pasura me furnizim me gjak, kanë trashësi të përshtatshme dhe lidhje të konsiderueshme mukoze. Ky prezantim përshkruan anatominë, teknikën kirurgjikale, furnizimin me gjak dhe demonstron përdorimin e kësaj lembo në qiellzë. Kontrolli i faktorëve etiologjikë, madhësia e defektit, vendndodhja anatomike dhe gjendjet e përgjithshme të pacientit mund të ndikojnë në prognozën pas graftit. Si përfundim, lembot muskulomukozale buccinatore janë të besueshme dhe mund të aplikohet në situata të ndryshme klinike.
Fjalët kyçe: Lembot muskulomukozale buccinatore, rindërtim oral, lembo kirurgjikale.

BUCCAL MUSCULOMUCOSAL FLAP FOR PALATE DEFECTS

Abstract

The buccinator musculomucosal flaps are axial pattern flaps that are suitable in reconstruction of medium sized oral soft tissue defects; they are rich in blood supply, have appropriate thickness and considerable mucosal paddle. This presentation describes anatomy,surgical technique ,blood supply and demonstrates the use of this flap in a palate.The control of etiologic factors ,size of defect,anatomical location and general conditations of patient could influence the prognosis after grafting.In conclusion buccinators musculomucosal is a reliable flap that can be applied to various clinical situations.

Keywords: *Buccinator musculomucosal flap, oral reconstruction, surgical flaps*

Introduction

Buccinator musculomucosal flaps(BMF) are useful for oral cavity reconstruction.In the past , these flaps were used primalrly for reconstruction pf cleft palate defects.The application of this flap to common defects of the posterior oral cavity after cancer resection has not been reported.The BMF provides sensate coverage for a variety of posterior oral cavity and oropharyngeal defects.We present the clinical experience and results to demonstrate the anatomical basis and clinical applications of the BMF.[1,3,4]

Objective To evaluate the use of the buccinator musculomucosal flap in the reconstruction of defects of the oral cavity

Materials and methods

Clinical cases were obtained from the Service of Oral and Maxillofacial Surgery in Albania.. Two patients were selected based on the defect anticipated after surgical excision. Both patients were followed up for a minimum of 1 year after surgery.Dissections of the buccinator muscle and overlying mucosa were performed via an intraoral approach.

Surgical technique

The tumor is excised and the defect is sized . Stensen duct is identified and the superior margin of the flap is outlined, keeping at least 3 mm inferior to the duct papilla.The anterior limit of the flap is 1 cm behind the oral commissure. The maximal graft size possible is 4 cm in a superior-inferior direction and 7 cm in an anteroposterior direction. The buccal mucosa and the buccinator muscle are incised to the level of the buccopharyngeal fascia, working in an anterior to posterior direction. A loose areolar plane exists between the buccinator muscle and the buccopharyngeal fascia, facilitating the elevation of the flap with blunt dissection.

The buccopharyngeal fascia should be preserved for 2 reasons: to prevent buccal fat pad herniation into the field of dissection and to avoid injury to branches of the facial nerve. Small branches from the facial artery may require ligation as may anterior venous tributaries from the pterygoid plexus. The buccal artery, accompanying vein, and buccal nerve arise laterally at the posteroinferior aspect of the buccinator muscle. The pedicle may be isolated to create an island flap to facilitate rotation, but this is not usually necessary. The flap is then transferred into the defect and secured with long-lasting absorbable sutures, and the donor site is closed primarily [5]

Results

Two patients underwent primary tumor excision of soft palate,with the defect closed using the BMF. There were no tumor recurrences and no problems with mastication, oral continence, or facial nerve function. All patients demonstrated touch perception over their flap 2 weeks after surgery. This was evaluated by light touch with a tongue depressor over the mucosa of the transposed flap.

The basic anatomy of this area has been described by Hollinshead.Through our dissections, we were able to outline the limits of the vascular territory of the buccal artery, investigate the incorporation of the buccal nerve with the flap, and define the amount of tissue that could be harvested. The buccal artery, a branch of the internal maxillary artery, originates near the lateral aspect of the lateral pterygoid muscle entering the posterior aspect of the buccinator muscle. The buccal nerve, a branch of the mandibular nerve, travels with this artery.The buccal nerve provides sensory innervation to the mucosa of the cheek. A rich venous drainage system is composed of the internal maxillary vein and pterygoid plexus posteriorly and from facial vein tributaries anteriorly.

We investigated the use of the posteriorly based BMF and found that it is a reliable, easily harvested local flap, useful for reconstruction of lesions involving the floor of mouth, and soft palate. It obviates the need for an intraoral bolster or harvesting of tissue beyond the oral cavity. The buccal nerve is adjacent to the buccal artery and is easily included with the flap to maintain sensation to the overlying mucosa. The BMF was raised within 30 minutes without the use of magnification in two cases, minimizing total intraoperative time.

All the donor sites were closed primarily leaving no raw surfaces, and there were no adverse effects secondary to harvesting the muscle, particularly with respect to mastication, oral continence, or facial nerve dysfunction.

All flaps used in our series were supplied posteriorly as harvested; however, based on our clinical observations, and review of the literature, we believe that this flap is adequately supplied from either source alone.

We noted that the vascular anatomy seen in surgical patients agrees with descriptions presented in prior studies. However, the proximity of the buccal nerve to the buccal artery and its incorporation into the flap has been neglected. Our patients, when tested over the area of reconstruction in the early postoperative period, reported fine-touch perception, and this may aid in oral rehabilitation.[1,2,3,]

Conclusions

The BMF has several advantages over other options that have been used in the reconstruction of oral cavity defects. Healing by secondary intention may risk contracture at the site with possible soft palate dysfunction. Skin grafts may not adhere to exposed bone and involve placement of a bolster that may be technically difficult in this area. Tongue flaps usually require 2 stages, and speech and swallowing may be adversely affected.The nasolabial flap requires an external excision and may not reach the retromolar trigone. Regional flaps, such as the temporalis muscle flap, or free flaps such as the radial forearm, involve extensive extraoral dissection and are better reserved for larger defects.

The anatomy of the BMF is reliable and consistent. It provides similarly textured sensate tissue for reconstruction in the oral cavity. It can be harvested quickly without morbidity, and the donor site can be closed primarily with excellent cosmesis and function. A significant advantage is the inclusion of the buccal nerve with the vascular pedicle, allowing the flap to be sensate. This versatile local flap should be considered for reconstruction of defects of the floor of mouth, retromolar trigone, and soft palate.

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