

Post-Bichat Sialoceles and Parotid Complications: Cystectomy Techniques, Developments, and Respiratory Issues

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ABSTRACT

Introduction: Bichatectomy is one of the most common facial surgeries, but it can be performed by all hands. The complication and most difficult to treat is Sialoceles. That's why we have developed a simple method to treat and resolve them.

Surgical Approach: We present a case of a young woman who developed a tumor in her midface 5 days after double mouth resection. Therefore, we decided to create a new narrow canal with drainage in an anatomical location. Good results have been obtained so far.

Discussion: The bichatectomy has an important historical background, as although it was originally a surgery, it had no meaning in the medical field. Bichat fat removal is currently performed for cosmetic rather than reconstructive purposes, so an enlargement of the salivary sac by more than 3% occurs independent of the surgeon's hands.

Conclusion: Considering the complications of bichatectomy, we decided to create an alternative for surgeons in training and find a simple solution.

Keywords:

Sialoceles, Fistula, Bichatectomy, Surgical treatment, Tumor

Introduction

The Buccal Fat Pad (BFP) was described in 1727 by the German anatomist Lorenz Heister in his Encyclopedia of Anatomy, who first called it the "gland of Moralis" (molar gland) [1]. Since he believed that it had no specific function, more anatomists were asked to study its function, embryology, and relation to the masticatory space [1].

Later, in 1801, Marie Francois Xavier Bichat, a French physician, surgeon, and anatomist, described this structure and also said that it was independent of adjacent structures.

Bichat's fat body consists of spherical, encapsulated fat masses. through a thin layer of connective tissue on the outside Anterior ends of the buccinator and masseter muscles. It has a pyramidal shape and extends to the maceterium area, superficial temporal area and deep temporal area, pterygomandibular area area, sphenopalatine area and inferior orbital area.

In 1977, Peter Egyedi used for the first time the BFP as a pedicle flap with a skin graft for closure of oroantral and oronasal fistulas. Tiedeman in 1986 showed that a BFP flap epithelialized 3 weeks after placement [1-3].

Since then, BFP has not only been withdrawn to improve facial esthetics, but has also been used to reconstruct intraoral defects, but now is the good options for aesthetic indication and have very good results, even the surgical approach, vestibular versus

buccal, it is a good option to analyze, and we decide to made an study to analyze surgical approaches and compare, in our hospital, removing the buccal fat pad [3,4].

Anatomically, BFP is a tubular collection of adipose tissue. A tissue that occupies an important position in the midface [2]. that Average weight is 9.3 grams, average volume is 9.6 cm³ [3].

Other authors have divided the body of the BFP into three lobes: the anterior, posterior, and middle lobes. Each of these three lobes is covered by an independent membrane, anchored by other ligaments, and vascularized by different arteries. [2-5].

Vascularization of the BFP occurs through three branches of the maxillary artery: the deep temporal artery, the buccal artery, the posterior superior alveolar artery, and the branches of the facial artery. Venous drainage occurs via the facial veins [1,4- Five].

Surgical Technique

We present the case of a female of 23 years old, during the direct interrogatory she want a slim middle third of the face. We program the patient to the operation room, & did it with local anesthesia, the approach by buccal incision. Surgery was 20 min. long with 3 cc of the buccal fat pad (Figure 1) after the surgery, everything was perfect, just Analagic Pain in the scale, so we discharged her from the hospital.

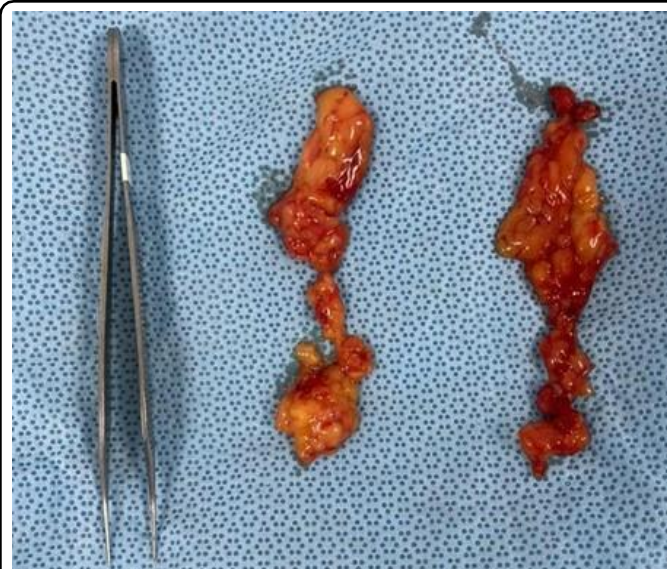


Figure 1: Fat Pad 3 cc from each side, without much blood.

On postoperative day 5 (Figure 2), the patient left to office presented with swelling of the left cheek along with minimal pain. Internal vestibular control was checked and there was a tumor over the port (totally closed) and no drainage over the stenon end canal.



Figure 2: Left side with the swelling at the 5-day post-op, increasing by days.

It was determined that surgical treatment of the salivary gland was necessary, and antibiotics were administered and the patient was prepared for the operating room.

The surgery was previously performed again under local anesthesia using local and general sedation.

Even though exploration with mosquito forceps was as deep as the previous approach, no stenotic tract was visible. Assemble the direct catheter (21 Gauchi blue syringe

color cap) to the top of the tumor, and instantaneously the gland begin to drainage saliva – creating a neostenon duct (Figure 3,4), and then tie with silk 4-0, by 4 stiches at each side, after the fixation where totally drained and the tumor decreases,



Figure 3: The material, the drainage that we use to the neoduct.



Figure 4: The neoduct with self fixation.

we finish the procedure we use a gauze to clean, and finish the procedure. The patient went home with a liquid diet only for



Figure 5: 1 day post-op of the follow up of the surgical drainage with our technique.



Figure 6: Left Side View at 1 day post-op of the follow up of the surgical drainage, the asymmetry.

72 hours, and review at the office, the tumor and the sialocele were drainage, and decided to leave the catheter for 10 days, after that the neostenon duct were fistulized, and the tumor was totally drained, and the swelling of the patient was 90% cured (Figure 5,6).

The follow up of the patient at the 15 days of the second surgery, was totally cured and with a good aesthetic result and the total recovery at the 3 months, the patients did not need any other instructions for the follow up of the drainage (Figure 7).



Figure 7: The Initial and the follow up of the patient at 3 months after the bichatectomy and the sialocele surgical treatment.

Discussion

Cheek fat pads have been removed in the past to improve facial aesthetics. It is also performed to reconstruct anatomical defects in the oral cavity and, thanks to the research carried out, it is now an excellent option for improving aesthetics and even has very good results. It is obtained. Buccal fat pad [1].

BFP has various features. In infants, it prevents the cheeks from retracting when sucking and improves movement between the muscles. The shape and function of the buccal fat pad changes significantly with age, and its suction function and volume relative to surrounding structures decrease over time. It can be concluded that various functions are attributed to it, including sucking, it contributes to mastication, protection and cushioning of neurovascular bundles, separation of masticatory muscles from each other, and aesthetics [1, 2].

Anatomically speaking, BFP is a fatty tissue that is covered with a thin layer of connective tissue and has a pyramidal shape. It occurs in the mental, temporal and infratemporal regions and extends deep into the pterygopalatine region. It is distributed in the masticatory space and separates the masticatory muscles [3].

BFP is a fatty tissue located deep in the face. Located behind the zygomatic arch. There are four processes: the pterygoid process, the superficial process, the buccal process, and the deep temporal process, which extend from the body into surrounding tissue spaces such as the subtemporal space and the pterygomandibular space [3]. The BFP is divided into three lobes, posterior, intermediate and anterior, according to

the structure of the lobar covers, the ligaments and the vessels that supply it. The buccal, pterygoid, pterygopalatine, and temporal extensions are derived from the posterior lobe. The BFP is fixed by six ligaments and supplied by various vessels. The function of the buccal BFP is to fill deep tissue spaces and serve as a gliding pad, a cushion during muscle contraction, and a propulsion force for external forces. Laxity, poor ligament development, or rupture of the capsule can lead to prolapse or loss of oral extension [4].

Stuzin et al. used 12 fresh cadaver specimens (6 samples) to generate their results. All cadavers were over 60 years old at the time of autopsy. In all preparations, the anatomical relationship of his BFP within the masticatory space and to facial structures was constant. The weight of each fat body was averaged 9.3 g, with an average volume of 9.6 c) measured by water displacement. There was small variation between the right and left sides, and the total weight of all samples averaged 1.5 g. No significant association was found between cheek fat size and overall cadaver fat accumulation. Their results showed that cachectic samples with little subcutaneous fat had buccal fat pads of normal volume and weight [4,5].

Surgery to remove BFP for aesthetic reasons has increased in recent years and can be performed by both dentists and plastic surgeons. Patients who are candidates for this surgical procedure typically have excessive facial circumference and, in some cases, tearing of the buccal mucosal tissue as a result of constant biting in the same area [5].

Biplanar resection is a surgical procedure performed to improve the cheek contour and emphasize the cheek hump by reducing it. Although it is a very useful tool in facial cosmetic surgery, it can cause serious complications such as immediate post-operative hematoma, facial paralysis or paralysis, abscess, stenosis of the canal, facial asymmetry, and salivary adenoma. There is a gender. Therefore, it is important that it is performed by professionals with the skills and expertise [6]. Complications such as excessive scarring and contracture, persistent trismus, change in cheek contour, or flap failure have been associated with excessively large BFP harvest and larger defects [6].

Deep buccal closure is usually a temporary phenomenon and often occurs when the BFP is passed through the orosubperiosteal tunnel with the purpose of closing the oroantral fistula in the first molar region. As fat is broken down and gradually replaced by other tissue, the vestibule tends to return to a more normal contour. Studies have shown that BFP flap harvest does not adversely affect facial contour or vestibular depth, and facial aesthetics and function are preserved in the majority of patients [6,7].

Sialocele is an accumulation of saliva in the tissues surrounding the gland duct or in the parenchyma without drainage [7,8]. There are different etiologies: neoplastic, infectious, traumatic, ductal stenosis, the most common etiology is saliva extravasation, secondary to a disruption of the parotid duct or parenchyma due to sharp trauma [9].

Salivary fistula or sialocele is a wound complication that occurs

in 5% to 39% of parotidectomies [8]. A salivary fistula occurs when the fluid is no longer contained and drains towards an epithelial surface, while a sialocele is an accumulation of saliva within the surgical site. It is thought that sialoceles are formed as a consequence of the alteration of the salivary parenchyma and the subsequent spillage of saliva into adjacent tissues. Research has suggested that sialoceles formation is associated with foreign bodies within the wound bed or the degree of parotid removal [10].

Conclusions

Bichat surgery has a scientific foundation in various issues, both aesthetic and functional [1] described that the approach matters more by vestibular as easiest. But complications after this common surgery are less than 10% in surgical hands.

Nowadays non plastic surgeons, try to do this common surgery, but not with a good results, and the rate of complications like Sialocele increase, but that is not the problem, is that many of this are not well treat.

Providing evidence and disseminating the technique regarding double resection Used during this operation to facilitate knowledge sharing among experts.

In this article, we try to teach to the plastic surgeon community a new, secure, and easy matter to treat this complications and the most important thing is that the aesthetic result does not change, one of the most feared of the patient and the surgeon.

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