

What are the complications of oral lipectomies?

Quais são as complicações nas lipectomias oral?

¿Cuáles son las complicaciones de las lipectomías oral?

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Abstract

Oral Lipectomy is a medical-dental procedure that aims to correct the volume of the adipose body of the cheek that is somehow generating unfavorable clinical implications for the stomatognathic system, being for facial aesthetic reasons, cause of trauma to the judgmental mucosa, occurrence of traumatic herniation. fat content into the oral cavity, or as a result of pathologies such as lipomas. Thus, this surgical procedure can be performed aiming at removing part of the fat content in the region indicated for the surgical procedure. However, in many cases this procedure can be accompanied by intraoperative complications such as hemorrhages or trauma to the parotid gland duct or nervous structures; as well as, postoperative complications such as edema, trismus, emphysema, seroma, hematoma and infections may occur. Thus, the surgeon must be familiar with the surgical technique used and these procedures must be performed and followed with extreme caution to minimize possible complications and optimize their treatments.

Keywords: Body adipose; Cheek; Lipectomy; Postoperative complications.

Resumo

A Lipectomia Bucal é um procedimento médico-odontológico que visa a correção do volume do corpo adiposo da bochecha que esteja de alguma forma gerando implicações clínicas desfavoráveis ao aparelho estomatognático, sendo por motivos estéticos faciais, causa de traumas em mucosa julgal, ocorrência de herniação traumática do conteúdo gorduroso para a cavidade bucal, ou em decorrência de patologias como caso de lipomas. Desse modo, esse procedimento cirúrgico pode ser realizado visando a remoção de parte do conteúdo gorduroso na região indicada para o procedimento cirúrgico. Contudo, em muitos casos esse procedimento pode ser acompanhado de intercorrências trans-operatórias como hemorragias ou traumatismos como ao ducto da glândula parótida ou estruturas nervosas; assim como, podem ocorrer complicações pós-operatórias como: edema, trismo, enfisema, seroma, hematoma e infecções. Desse modo, o cirurgião deve estar familiarizado com a técnica cirúrgica utilizada e esses procedimentos devem ser realizados e acompanhados com extrema cautela para minimizar as possíveis complicações e otimizar seus tratamentos.

Palavras-chave: Corpo adiposo; Bochecha; Lipectomia; Complicações pós-operatórias.

Resumen

La Lipectomía Oral es un procedimiento médico-odontológico que tiene como objetivo corregir el volumen del cuerpo adiposo de la mejilla que de alguna manera está generando implicaciones clínicas desfavorables para el sistema estomatognático, siendo por motivos estéticos faciales, causa de traumatismo en la mucosa juiciosa, aparición de hernia contenido de grasa en la cavidad oral, o como resultado de patologías como los lipomas. Así, este procedimiento quirúrgico puede realizarse con el objetivo de eliminar parte del contenido de grasa en la región

indicada para el procedimiento quirúrgico. Sin embargo, en muchos casos este procedimiento puede estar acompañado de complicaciones intraoperatorias como hemorragias o traumatismos en el conducto de la glándula parótida o estructuras nerviosas; así como, pueden presentarse complicaciones postoperatorias como: edema, trismo, enfisema, seroma, hematoma e infecciones. Por tanto, el cirujano debe estar familiarizado con la técnica quirúrgica utilizada y estos procedimientos deben realizarse y seguirse con extrema precaución para minimizar las posibles complicaciones y optimizar sus tratamientos.

Palabras clave: Cuerpo adiposo; Mejilla; Lipectomia; Complicaciones postoperatorias.

1. Introduction

Oral lipectomy, popularly known as bichectomy, has been widely performed by many dental professionals in recent times. Due to the great demand for patients dissatisfied with disharmonious facial features or aesthetic influences related to the image of media icons presenting more harmonious and defined facial features. Another great counterpart comes from professionals who widely publicize and indicate this procedure as a relatively simple and quick procedure and now it is spreading among professionals even more with the recognition of facial harmonization as a dental specialty with regularization by the Federal Council of Dentistry of the technique of cheek lipectomy (RESOLUÇÃO CFO-198, de 29 de janeiro, 2019).

There are techniques described in the literature that aim precisely to change this facial contour. Among them, we can mention: facial liposuction, described in the study by (Goodstein, 1997); lipolysis injection, present in the study by (Duncan & Rotunda, 2011); and the removal of the Bichat ball, addressed in the studies by (Jackson, 2003) and (Matarasso, 2006) but which is still little reported in the literature. It is necessary to pay attention, however, that each of these techniques has indications and that the peculiar and individual examination of the patient must be carried out prior to any surgical intervention.

The volumetric appearance of the human face is defined both by the bone structures and by the soft tissues that are a complex system of subcutaneous fat, muscles, ligaments and within this context, the adipose body of the cheek, constitutes a significant part of the middle third of the face and deserves special attention in the dental field (Guryanov & Guryanov, 2015).

This technique can serve as an alternative for patients who remain dissatisfied after repeated attempts at facial liposuction and lipolysis injection, mainly because these procedures are not well indicated for this region in particular, which is due to the fact that the Bichat ball fat anatomically deep, difficult to access by these procedures and also due to the fact that it is resistant to lipolysis (Matarasso, 1991).

However, cheek fat lipectomy can present numerous intraoperative as well as postoperative complications, in which the professional who performed the procedure is often not able to treat. In this way, this work brings together the complications that may occur in procedures related to the surgical approach of the adipose body of the cheek and intimate anatomical structures.

2. Proposition

This work brings together, through a bibliographic survey and expertise of this team with the complications that can occur in procedures related to the surgical approach of the adipose body of the cheek and intimate anatomical structures.

3. Methodology

For the present work, a survey was carried out in the Pubmed database relating terms (mesh) such as: Complications; Ache; Edema; Limitation of mouth opening; Injury to the parotid gland and/or duct; Seroma (Lymph accumulating capsula); Infection (Abscess); Emphysema (accumulation of air in the tissues); Nerve injuries (neuropraxia by compression), Axiotmesis (superficial nerve injury) and Neurotmesis (neuronal rupture) associated with terms such as cheek, cheek fat, Bichat's ball, Oral

lipectomy. The selection criteria involved the identification of related terms being cited in their titles, abstracts containing information on complications and/or treatments. The exclusion criterion was related to the focus of the work, where many previously selected works still did not present in their full text the appropriate context related to the theme. In support of this review, cases of complications related to these procedures were illustrated.

4. Literature review

4.1 Pain

Pain can be defined as an unpleasant sensory or emotional experience stimulated by trauma. Every surgical procedure has the potential to cause pain. The sensation of pain intensity is considered according to the individual perception of each individual due to the background of emotional involvement as an interference factor of this perception (International Association for the Study of Pain – IASP) (Kinzbrunner BM et al., 2002; Woolf, 2000).

Thus, procedures that impact different senses such as the visual aspect of the lesion, local sensory such as volume and apparatus such as synthesis, systemic sensory such as feeling of prostration, or even psychological states such as depression (Kinzbrunner BM et al., 2002; Woolf, 2000).

This state of post-operative pain sensation must be predicted and treated in a preemptive way, either by central or loco-regional medications, mainly with the aim of minimizing postoperative morbidity (Kim et al., 2009; Markiewicz et al., 2008; Vitor et al., 2008; Wall, 1988; Weil et al., 2007; Woolf & Chong, 1993).

4.2 Edema

Edema consists of an abnormal accumulation of fluid consisting of an aqueous solution of salts and plasma proteins and its composition varies according to the cause of edema in the interstitial extracellular compartment or in body cavities due to increased vascular permeability in the case of inflammation and also, drainage. deficient lymphatic.

Thus, the edema is compatible with the inflammatory process generated during the surgical procedure and the postoperative period. Therefore, procedures that are too long, electrolyte imbalance of the patient's systemic conditions and poor drug therapy can cause exacerbated edema. (Figure 1)

Figure 1: Front view image of a patient 48 hours after buccal lipectomy with the presence of volumetric increase limited to the anterior border of the mandible and anterior to the masseter muscle, compatible with edema in the cheek region.



Source: Collection of the Postgraduate Course in Surgery at the Faculty of Dentistry of Araçatuba – UNESP.

The prevention of edema starts from the control of the inflammatory process through previous controls of the volume of liquid, salts and proteins in case of systemic decompensations, another important factor is the implementation of effective drug therapy through the administration of dexamethasone 8mg one hour before the procedure. surgical procedure inhibiting the release of the inflammation cascade in a preventive manner (preemption articles); less traumatic and quick surgical procedure.

However, if the edema occurs or gets out of control, it means a failure in the postoperative period, either due to lack of cooperation of the patient, not following professional recommendations, or due to failure in drug therapy, and should be performed at professional discretion in accordance with the volume generated by the edema as well as the inflammatory process (Abad-Gallegos et al., 2011; Kim et al., 2009; Markiewicz et al., 2008; Vitor et al., 2008; Wall, 1988; Weil et al., 2007; Woolf & Chong, 1993; Yamamoto et al., 2016).

4.3 Trismus

Trismus is characterized by the inability to open the mouth normally, due to spasmodic contraction of the muscles related to jaw movements, mainly the masseter muscle, resulting in the closing of the mouth. This condition can result from a variety of diseases, including tetanus, complications from radiation therapy, trauma, or from neoplastic conditions.

In this case, the surgical trauma caused in the vicinity of the masseter, temporal, medial and lateral pterygoid muscles, as well as direct trauma to the buccinator muscle, can trigger an inflammatory process leading to trismus due to myositis.

Thus, this occurrence is expected in traumatic surgical procedures in these anatomical surroundings, and should be foreseen and treated in a preventive way, through the action of steroidal anti-inflammatory drugs prior to the surgical procedure, thus modulating the inflammatory process even before it occurs, controlling trismus. If it does occur, its treatment should be carried out with physical therapy and non-steroidal anti-inflammatory drugs such as ibuprofen (Kim et al., 2009; Markiewicz et al., 2008; Vitor et al., 2008; Wall, 1988; Weil et al., 2007; Woolf & Chong, 1993) (Fig. 2).

Figure 2: Front view image showing trismus limiting the ability to open the mouth.



Source: Collection of the Postgraduate Course in Surgery, Faculty of Dentistry of Araçatuba – UNESP.

4.4 Emphysema

Emphysema is a complication that can occur during or after surgical-dental procedures. This condition can be considered innocuous by itself and regresses spontaneously, in this intercourse it can cause discomfort and even pain to the patient. It can be caused in these procedures in the postoperative period by the patient himself due to high intra-oral pressure either by lowering the head in sudden movements, or by sneezing or coughing with the mouth closed, leading to penetration of

air into the surgical wound. (Fig. 3). It is essential that emphysema is correctly diagnosed, through clinical and radiographic examination, and it must be distinguished from necrotizing fasciitis (Kreisner et al., 2005; Shovelton DS, 1957).

Figure 3: Clinical image in frontal view of a patient who developed emphysema after oral lipectomy, where it is possible to visualize bilateral volumetric increase in the cheeks region, showing eyelid involvement on the left side. Soft consistency on palpation denoting the presence of gas within the eyelid tissues.



Source: Collection of the Postgraduate Course in Surgery, Faculty of Dentistry of Araçatuba – UNESP.

Shovelton (1957) classified subcutaneous emphysema associated with dental procedures into four categories with respect to cause: (1) caused by actions on the part of the patient, (2) by forced air directly into the tissues, (3) by prolonged procedures, and (4) for indefinite cause (Shovelton DS, 1957).

Its treatment is symptomatic and its spontaneous resolution should occur around 72 hours after its occurrence, antibiotic therapy is generally instituted to avoid gaseous contamination of the tissues, which can lead to necrosis.

4.5 Seroma

Seroma is characterized by the accumulation of encapsulated fluid that forms due to the extravasation of blood plasma or lymph appearing in the first postoperative weeks, in the case of oral lipectomy, it occurs inside the surgical cavity left as a “dead” free space where there was the adipose body of the cheek anteriorly, leaving a palpable volumetric increase with a “bladder” appearance, differing from edema due to this characteristic and because it persists after the regression of the edema (Figure 4).

Figure 4: Clinical image showing volumetric increase on the patient's right side after 72 hours, after edema regression, with accumulation of liquid inside the oral space, without the presence of phlogistic signs.



Source: Collection of the Postgraduate Course in Surgery, Faculty of Dentistry of Araçatuba – UNESP.

The treatment of seroma is similar to that of an abscess or hematoma drainage, its differential diagnosis is obtained by means of aspiration puncture and evidentialization of the content with characteristics compatible with blood plasma, and the installation of a drain in a preventive way is not necessary or indicated (Köhler et al., 2008).

The prevention of seroma formation is performed by making compressive dressings from the first postoperative period, intra-oral close to the surgical wound by interposing sterile gauze between the teeth and cheeks, and compressive dressings by elastic-adhesive bandage. or micro-porous tape. In this way, bilateral compression reduces the possibility of formation of free spaces within the tissues.

4.6 Hematoma

Hematoma occurs as a result of the rupture of small blood vessels (capillaries) and the accumulation of blood locally, often as a result of bleeding after a trauma, whether surgical or not. Hematomas are characterized by a volumetric increase of rapid formation, which distends the tissues in a rigid and painful way, presenting a bluish-reddish-black color, often only verified after its removal from the interior of the tissues, often the superficial visualization through the skin and mucosa is caused by ecchymoses, which are more superficial and may remain even after removal of the clot formed by the hematoma (Köhler et al., 2008) (Figure 5).

Figure 5: Postoperative images (a) Immediate extra-oral appearance after performing a lipectomy procedure with hemorrhagic complication showing peri-orbital ecchymosis volumetric increase involving the temporal and zygomatic region on the left side; (b) Intra-oral aspect showing the area of the jugal hematoma and the aspect of the extension of the sutured access after removal of the clot.



Source: Collection of Professor Doctor Sormani Queiroz and team, Quixadá-CE.

In general, hematomas must be removed from the interior of the tissues to relieve the painful sensation, to avoid the subsequent colonization or formation of a culture medium in the body or the formation of fibrosis and adhesions. Thus, allowing surgical inspection to treat the wound and possibly ligation of the ruptured blood vessel that gave rise to hemorrhage, without the need or indication to install a drain in a preventive way (Köhler et al., 2008).

4.7 Infections

Head and neck or odontogenic infections can be defined as a progressive infection that originates from contamination by microorganisms in soft tissues such as skin, mucosa, muscles, fat, glands or even hard tissues such as bone and teeth, the main causes being the of necrosis, dental caries with pulp involvement, gingivitis, periodontitis and pericoronitis, in this specific case related to the oral space due to contamination of the surgical wound after removal of the adipose body from the cheek (Figure 6).

Figure 6: Image of a young patient undergoing oral lipectomy with symptomatic evolution and presence of phlogistic signs in the 72-hour postoperative course of purulent drainage through intraoral surgical access.



Source: Collection of the Postgraduate Course in Surgery, Faculty of Dentistry of Araçatuba – UNESP.

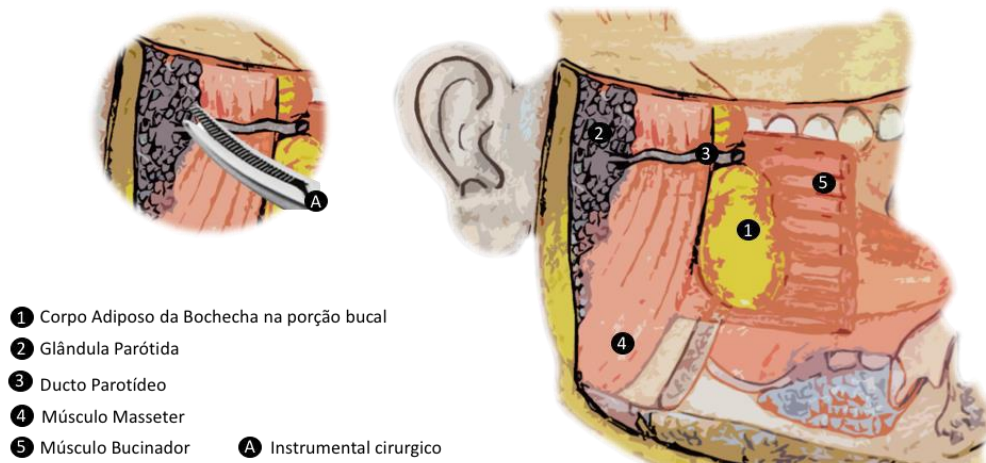
However, they can progress to major complications such as Ludwig's Angina, orbital cellulitis, Cavernous Sinus Thrombosis (Bascones Martínez A et al., 2004; Witherow et al., 2004) and Mediastinitis (Filiaci et al., 2015).

These infections can be classified according to: form of evolution, pathogens (causing microorganisms), in an acute or chronic state, presence of viruses, bacteria, fungi and protozoa, or anatomical structures involved such as the salivary glands, bone, tooth or tissue. lymphatic system (Witherow et al., 2004). In addition, there are classic signs that signal a possible infection to the clinician. The classic signs and symptoms of an odontogenic infection will vary according to the stage of disease progression, but, in general, they may be present: Pain, localized or diffuse, fever, swelling, flushing, dyspnea, dysphagia, dyslalia, malaise, trismus and toxic face. (Boscolo-Rizzo & da Mosto, 2009).

4.8 Parotid gland duct injury

In injuries to the duct of the parotid gland or the gland itself directly, which are likely causes of parotid fistulas, as well as sialitis due to traumatic accidents during the surgical procedure to approach the adipose body of the cheek. It culminated in an anatomical criterion for defining the surgical access that would reduce the risks (Figure 7).

Figure 7: Parotitis due to blunt and laceration trauma in the parotid gland during oral lipectomy. (1) Adipose Body of the Cheek in the buccal portion positioned anterior to the masseter muscle and below the parotid duct; (2) Parotid gland positioned posteriorly to the masseter muscle and above it towards the face, and may be injured when confused with the fat pad of the cheek; (3) Parotid Duct as the main anatomical point of reference and attention in the oral lipectomy procedure; (4) Masseter muscle as an anatomical pillar of delimitation whose anterior to it is the adipose body and posterior to its anterior border is the start of the glandular contents of the parotid; (5) Buccinator muscle, which acts as a lateral barrier between the fat pad of the cheek and the region of the buccal mucosa; (A) Surgical instrument that must have a blunt tip and be used with short and delicate movements, avoiding accidents with its untimely or irregular use.



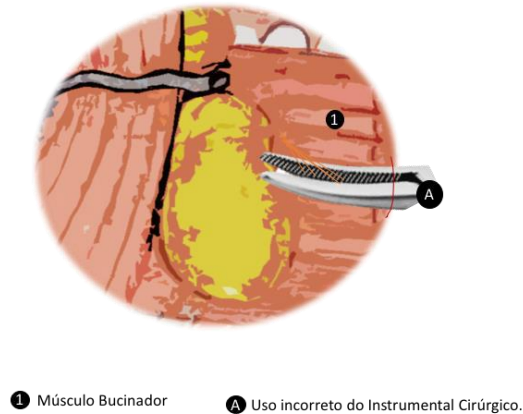
Source: Made by the Author.

Management of these injuries has been considered unsatisfactory in the past, and numerous treatment methods with varying success and morbidity have been described. A prospective study by Parekh in 1989 reports results of conservative therapy in 51 patients over a 3-year period. In 50 patients, the lesion healed after conservative treatment. During the initial phase of the study, a limited conservative regimen was used, whereby patients did not receive anything orally for 5 days. During the latter part of the study, patients were not administered orally until complete healing of the lesion. In terms of the time it took for the lesion to heal, the differences between the two regimens (24 +/- 4 vs. 9.4 +/- 0.9 days) were highly significant ($p < 0.001$). The response to conservative management depended on the severity of the lesion, demonstrated by sialography. Lesser intraparotid ducts (G1) injury healed in a significantly shorter time compared to a large intraparotid duct injury (G2) or ductal injuries. In this same work, there was a significantly longer delay in healing with complete duct transections (21.5 +/- 3.7 days) compared with partial duct transections and G2 injuries (10.2 +/- 2.1 days). There was no difference in the mean healing period between salivary fistulas and sialoceles. Concluding that a classification of parotid fistulas based on sialographic findings has prognostic and therapeutic value since the degrees of involvement influence the result (Parekh et al., 1989).

4.9 Muscle fiber injuries

Muscle injuries that are likely to occur as a result of soft tissue dieresis can result in unwanted or poorly selective myotomies, allowing for loss of function, or irregular repair and shape change. These irregular repairs of muscle tissues can evolve with inadequate repositioning causing fibrous adhesions and painful symptoms may occur (Järvinen et al., 2000) (Figure 8).

Figure 8: Scheme of Muscle Fiber Injury. (1) Buccinator muscle that can be injured in case of incision of its fibers, impingement and incorrect divulsion; (A) Surgical instruments used incorrectly.



Source: Made by the Author.

Therefore, the use of a delicate, direct technique, focusing on less damage to the anatomical planes, should be used in order to reduce the need for large dieresis and accesses of compatible proportions.

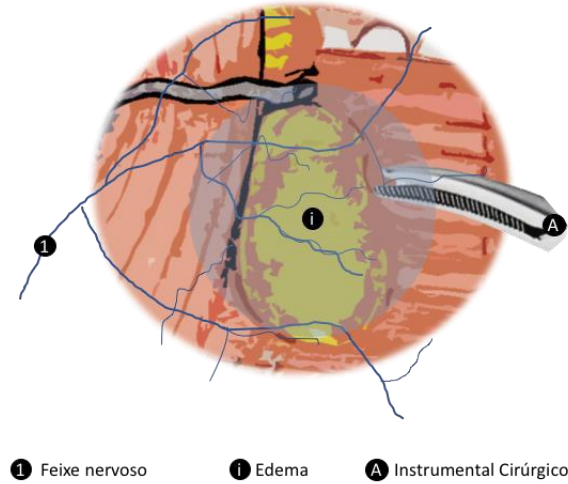
Closure of the muscle plane must be performed in order to bring the muscle fibers closer to their passive accommodation and complete occlusion, avoiding the formation of irregular fibrous adhesion or the opposite, with a loose suture that allows content herniation or the presence of “dead spaces” (Järvinen et al., 2000).

4.10 Injuries to nerve structures

Introduced as a pubmed mesh term, it characterizes traumatic injuries to the facial nerve. May result in facial paralysis, loss of taste sensation in the anterior tongue, decreased lacrimation and salivation. The nerve may regenerate and reform its original pattern of innervation, or it may regenerate aberrantly, resulting in inappropriate lacrimation in response to gustatory stimuli (eg, "crocodile tears") and other syndromes.

In this sense, during oral lipectomy there are risks related to trauma to nervous structures close to the parotid gland or motor plate of the facial muscles (Figure 9).

Figure 9: Scheme of Nerve Injury. (1) Nerve bundle that can be injured in its peripheral region generating neurapraxia, or in more severe and rare cases in this procedure axonotmesis or neurotmesis; (i) compromised area due to accumulation of fluids that compress the region and temporarily alter nerve transmission; (A) Untimely movements that can be the cause of blunt trauma.



Source: Made by the Author.

The most likely occurrence is neuropraxia, which is a superficial injury to the nerve bundle by the trauma itself or compression by edema, which generates a transient effect or loss of function lasting a few weeks (Bennett, 2018; Seddon, 1942).

5. Results and Discussion

Epstein LI. (1980) Describes oral lipectomy as a technique as being simple and safe and providing predictable results for correcting cheeks. Oral lipectomy could be performed alone or as an adjunct to other facial aesthetic surgeries. However, in his work he mentions that no permanent complications were experienced in 9 patients during a period of three and a half years, demonstrating that there were possibly unreported complications, but these were remedied (Epstein, 1980).

There are several other treatments for localized fat reduction. Among them is Ultracavitation, which is a resource for the removal of localized fat, with its effectiveness based on the biophysical effects caused by a low-frequency ultrasound system. The procedure can be performed in an outpatient setting and its non-invasive nature ensures quick, painless results without the side effects inherent to invasive procedures. However, the literature does not present articles relating this technique to the adipose body of the cheek with results that can be discussed.

In the same year, Cardoso and Aboudib (1980) proposed a more extensive lipectomy than usual along and above the mandibular ramus, in order to obtain better results in the neck and lower face in rhytidoplasty. The operative technique is based on anatomical findings. The results are excellent when the procedure is indicated and correctly performed. Lipectomy is recommended in patients with abnormal fat deposits on the lower face and neck; It is not recommended for obese patients (Cardoso de Castro C & Aboudib JH Jr, 1980).

Guerrerosantos J I, Manjarrez-Cortes A., (1989) In Guadalajara, Mexico, describes a procedure that combined the removal of the buccal fat pad by excision and subcutaneous fat from the cheek and neck by lipoplasty; this results in an improved contour on the cheeks and neck. The technique was applied to 28 patients of various ages, without complications and with satisfactory results. Both the immediate results of the operation and the results recorded 1 year or more after the operation were considered by the author to be very satisfactory. Excellent results were observed in nine young patients, and good results

were obtained in 19 older patients. A review is given of findings previously reported in the literature. At the time, the authors were inclined to believe that removal of the vestibular fat pad and subcutaneous fat lipoplasty of the cheeks and neck offers more improvements than either procedure alone. It is hoped that this combined procedure will provide a solution to the problematic problem of plump cheeks and lead to a safe method of contouring the cheek for a more youthful and beautiful appearance, thus demonstrating from his experience that performing larger and combined procedures will still presented results that outweighed the risks of the procedure (Guerrerosantos & Manjarrez-Cortes, 1989). However, combined procedures, on the other hand, increase operative time and morbidity in the tissues involved, which may lead to greater postoperative complications.

Newman J in (1990) – Published in *Plast Reconstr Surg*. Removal of the buccal fat pad by liposuction. Showing the follow-up of the volume removal trend in the midface region through less invasive techniques at that time. In properly selected individuals, harvesting buccal fat could produce dramatic changes in facial appearance, reducing cheek fullness and highlighting malar eminences. Using fresh cadaver dissection, the anatomy of the buccal fat pad was outlined and its relationship with the masticatory space, facial nerve and parotid duct in order to reduce the risk of accidents and complications that have always been the subject of discussions. An intraoral approach to the collection of buccal fat was described based on these anatomical findings with less risk and clinical experience in the manipulation of the buccal fat pad for aesthetic modification of the facial contour started to be illustrated with a focus on aesthetics with safety (Newman, 1990).

Matarasso A. (1991) reports that the excision of the buccal fat pad improves the esthetics of the middle region of the face. In his article, he determines criteria 5 criteria for the aesthetic definition of this region and presents a series of 25 consecutive patients who underwent submuscular fat removal by excision of the buccal fat pad to improve the face. To preserve the subcutaneous fat commonly lost with aging and avoid late secondary deformities, only buccal submuscular fat excision was recommended in a carefully selected group of patients.

In this way, we can understand that the literature indicates that the removal of the adipose body of the cheek is effective for the modification of the facial contour and aesthetic improvement when well indicated and according to Matarasso (1991), it is more recommended than subcutaneous liposuction, avoiding secondary deformities and late due to aging.

However, the removal of the adipose body from the cheek can lead to the absence of reserve tissue volume for use in situations of oroantral communications, therefore, the need and indication of this procedure must be performed judiciously.

Studies such as the one by (Jain et al., 2012), who presented a clinical study of 15 cases with the use of the buccal fat pad in a pedicled way for closure of oroantral fistula, being considered an effective and reliable flap for the repair of OAF with several advantages. Larger cases of FAO with dubious outcome can be closed in two layers using the BFP together with the buccal advancement flap. It can also be considered as a reliable back-up procedure in case of failure of other techniques, showing the possibility of use in OAF, thus showing that the indication and accomplishment of the removal of the adipose body of the cheek must be carried out with parsimony.

There is still a scarcity of studies related to the surgical procedure that involves the isolated removal of fat from the cheek body for aesthetic and functional purposes, as well as a safe and reliable protocol with the description of the best surgical technique, based on scientific studies to serve as a guide. model for dental professionals. Therefore, further studies could help to create specific norms and rules to reduce errors and increase safety, as well as to better understand the long-term consequences of removing the adipose tissue from the cheek, its fate after treatment, as well as the purposes of the treatment. use of cells and adipose tissue after their removal, as they were not mentioned in any article included in this study (Alvarez & Siqueira, 2018; Baudouin & Tiberghien, 2004; Kindlein, 2017; Lima & Souza, 2017; Tanner & Weiner, 1949; Valente et al., 2018; Xu & Yu, 2013).

The incision in the surgical procedure for accessing the fatty fat of the cheek, adopted by most articles, was the inferior access to the papilla of the parotid gland duct (Baudouin & Tiberghien, 2004; Lima A.M & Souza R.D, 2017; Tanner & Weiner, 1949; Valente D.S. et al., 2018; Xu & Yu, 2013). Thus, demonstrating the great concern with complications due to injuries to the parotid gland duct.

According to the literature, there is a consensus that the cheek fat pad lipectomy procedure can be performed quickly and safely. However, the number of patients mentioned by these articles was generally small and there were still reports of complications in their cases, even if only briefly mentioned, generally demonstrating a more informative character in favor of the technique.

6. Conclusion

The surgeon must be familiar with the surgical technique used and these procedures must be performed and followed with extreme caution to minimize possible complications and optimize their treatments in a well-indicated and informed manner regarding the risks to the patient. In this sense, new searches in the literature and unpublished studies are essential to obtain more success in treatments and lower rates of complications in the postoperative period.

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