(International Print/Online Journal)

SJIF IMPACT FACTOR: 5.565
PUBMED-National Library of Medicine ID-101739732

ISSN (Print): 2209-2870
ISSN (Online): 2209-2862

International Journal of Medical Science and Current Research (IJMSCR)
Available online at: www.ijmscr.com
Volume 5, Issue 4 , Page No: 720-722
July-August 2022

IJMSCR

Pedicled Buccal Fat Pad Flap For Closure Of Oroantral Fistula: A Case Report

Dr. Prakriti Bhardwaj
BDS, Chandra Dental College & Hospital, Barabanki, U.P., India

***Corresponding Author:**
Dr. Prakriti Bhardwaj
BDS, Chandra Dental College & Hospital, Barabanki, U.P., India

Type of Publication: Case Report
Conflicts of Interest: Nil

Abstract

A pathological abnormal communication between the oral cavity and the maxillary sinus is called as an oroantral fistula, it may arise as a result of the failure of primary healing of an OAF ,osteomyelitis ,radiation therapy,trauma, dental infections or any iatrogenic complications. The term oroantral fistula is used to indicate a canal lined by epithelium that may be filled with granulation tissue or polyposis of the sinus membrane. They commonly develop in the ages of 30 and 60, with sexual dimorphism with males frequency more as compared to female . Many techniques have been proposed for closure of fistulas by Killey & Keys(1969), Tideman et al (1986), and EGYEDI (1977). Few of the traditional approaches of repair subject to buccal advancement flaps, palatal rotation and palatal transposition flaps,tongue flaps, and naso-labial flaps[2]. The most common technique is trapdoor technique[3].The pedicled buccal fat pad flap procedure given by EGYEDI (1977), in todays scenario it has become a well versed technique for closure of intra oral defects due to phenomenal results as it well illustrates with special emphasis showing the strength of BFP against tension forces. The aim of this report is reporting a clinical case of closing oroantral fistula through buccal fat pad.

Keywords: NIL

Introduction

Case Report

A 36-year-old male patient was referred to the department of oral surgery for treatment and the viable management of the oroantral fistula. After inquiring for the case history, he exclaimed his upper right first molar extraction 7 months back with a subsequent oroantral fistula formation. He underwent many surgeries but infelicitously to no avail.

As per the clinical examinations the fistula was (1 cm diameter) at the depth of upper right first molar extraction socket. Flooded with infection, patient due to unenlightenment of infection had been using gauze to cover the opening. Though Panoramic x-ray did not reveal any tooth or any root in sinus.

Medications involving Antibiotics and anti-inflammatory drugs were advised for 7 days along with nasal decongestant drops. By the end of medical treatment, the patient's complaints had dwindled but the dimensions of the fistula remains the same . Subsequently, the patient underwent a surgery to close the oroantral fistula under local anesthesia.

Under local anesthesia following all aseptic measures, the buccal flap was elevated, the borders of the fistula were subperiostally incised leading to exposure of the oroantral fistula.

The posterior superior elevation was done with a freer elevator close to the maxillary wall until the buccal fat pad was found. Then it was dissected and moved into the defect, a mild suction was initiated with aspirator beak, which enabled the fat elevation up to the oral cavity. The buccal fat pad was gently stuck by tissue forceps and gripped up to the fault.

After completely covering the bone defect, the buccal pad of fat was stitched to the palatal mucosa with 3.0 vicryl suture. Also a buccal advancement flap was

also sutured with palatal mucosa to cover the buccal fat pad. After the surgery, the patient was put on medication and instructed aiming at preventing increase or decrease in maxillary sinus pressure. Patient was instructed not to blow the nose, avoid sneezing and sucking on a straw or cigarette and all the post operative instructions were explained. The postsurgical phase had no complications, and a mild loss of vestibular depth was observed.

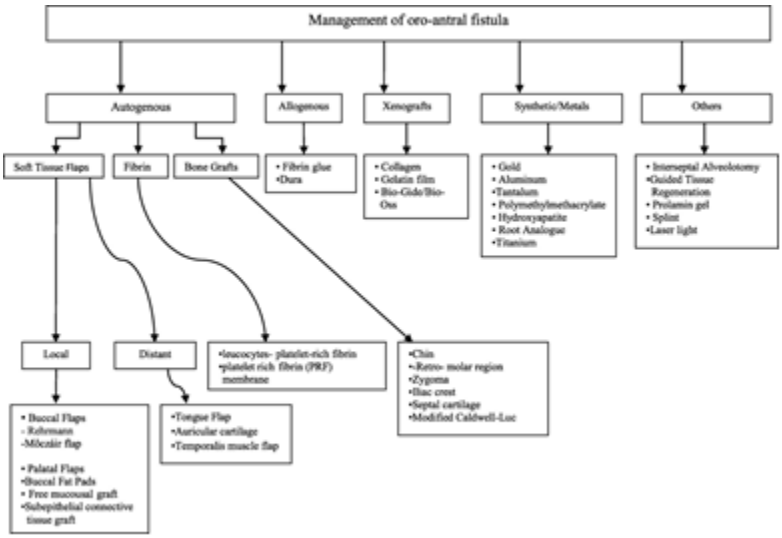


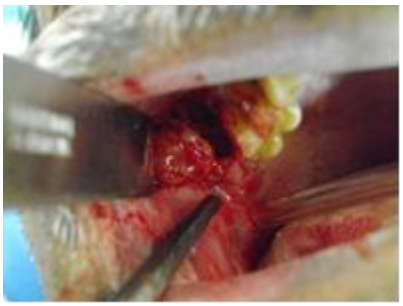
Figure 1. Oroantral fistula

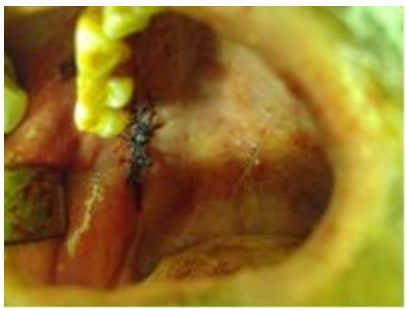
Figure 2. Buccal fat pad lift

Figure 3. Fistula exposition

Figure 4. Initial suture closing

Figure 5. Final aspect of the fistula





Discussion

The primary closure of oroantral fistulals in 48 hours presents a 90 to 95% success rate[4,5] but the success rate declines after that. It is essential that the sinusitis should be examined and treated first. In case of sinusitis, the failure rate further increases. Several authors demonstrated that a three-day exposure of maxillary sinus presents a pathology through radiographic evidence.[5,6]

Volume 5, Issue 4; July-August 2022; Page No 720-722

Buccal pad of fat success has been proved in the medical literature. It interferes little with vestibular depth. The buccal advancement flap interferes more with vestibular depth and cannot be used for larger oroantral fistula. The palatal flaps caused more discomfort, for the patient, than buccal pad of fat. The artificial material placement leads to exposure of the implanted material and infection and removal of implant is essential.

The buccal pad of fat causes little adverse effects on the symmetry of face. It can be used for larger oroantral fistulas with sufficient success rate. Due to its anatomical position, it has beneficial characteristics to be used as pedicellated graft to reconstruct intraoral defects, especially in the posterior region of the maxilla.

Conclusion

BFP flap is a satisfactory method to close the oro antral defects .Rapid epitheliazation of rhe uncovered fat is a peculiar feature of BFP flap stalk.The advantages of this very technique include good epithelization ,high rate of success, though vestibular height is decreased.

References

1. Principles of Oral and Maxillofacial Surgery. Ed. Peterson LJ. Lippincott Raven. Philadelphia, New York 1997, pp.223-226
2. Awand MN. Closure of oroantral fistula. Int J Oral Maxillofac Surg. 1998 Apr; 17(2): 110-115.
3. Bergh Van Den JPA, Bruggenkate CM, Disch FJM et al. Anatomical aspects of sinus floor elevations. Clin Oral Implants Res, 2000; 11: 256-256.
4. Eppley B and Scfaroff A. Oro-nasal fistula secondary to maxillary argumentation. Int Oral Gurg. 1984, 13:535.
5. Stajcic Z. The buccal fat pad in closure of oro-antral communication–A study of 56 cases. J Craniomaxillofac Surg. 1992, 20: 193.
6. Ericson S, FinneK and Persson G. A clinical radiographic review of treated oro-antral communications. Int J Oral Surj. 1973, 2: 185.

Volume 5, Issue 4; July-August 2022; Page No 720-722