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Surgical management of oro-antral fistula and the outcomes.

Resources searched


Summary

I found no systematic reviews or randomised clinical trials. There were however a lot of case reports, covering several surgical techniques which have been used to close oral-antral fistulas, including bone grafting, buccal fat pads, rooting gel, transplanted molars, palatal flaps, palatal rotation-advancement flap, and autogenous monocortical bone blocks. One paper recommends suture for small oral-antral communications of 3-5 mm and buccal fat pad for sizes greater than 5 mm. None of the treatments resulted in complications and in variable success rates.

Healing seems to have been mostly uneventful in buccal and pedicled fat pads, although in one study, 3 patients treated with pedicled buccal pads developed flap necrosis. One paper recommends suture for small oral-antral communications of 3-5 mm and buccal fat pad for sizes greater than 5 mm. 4 out of 7 patients treated with press-fit closure required additional internal fixations, and 3 out of the 21 patients studies developed wound dehiscences at the grafted sites. Treatment using palatal rotation-advancement flap resulted in minimal complications on long-term follow-up, but was successful in only 76.2% of cases. Autogenous monocortical bone blocks resulted in two patients requiring additional internal graft fixation. Root resorption did not occur, and good functional results were obtained without any complications, using transplanted teeth.
Guidelines
SIGN
Management of Unerupted and Impacted Third Molar Teeth 2001

Oral-antral fistula is listed as an uncommon outcome of unerupted third molar management.

Evidence based reviews

None

Published research

1. Non-surgical management of an oro-antral fistula in a patient with HIV infection
   Australian Dental Journal 2008 48(4) p. 255-258
   An oro-antral fistula was de-epithelialized under local anaesthesia and the patient wore a surgical splint continuously, removing it only for cleaning, for an eight week period. Chlorhexidine gel was regularly applied to the fitting surface of the splint and the oro-antral communication. This procedure resulted in resolution of the patient's symptoms within two weeks. Complete healing of the oro-antral fistula was evident following eight weeks of wearing the surgical splint.

2. One-stage operation of large oroantral fistula closure, sinus lifting, and autogenous bone grafting for dental implant installation.
   Author(s): Lee BK
   Citation: Oral Surgery Oral Medicine Oral Pathology Oral Radiology & Endodontics, June 2008, vol./is. 105/6(707-13), 1528-395X
   Publication Date: June 2008
   Abstract: Bone grafts to the maxillary sinus are often required after closure of an oroantral fistula (OAF) to allow for subsequent implant installation. This report describes a single procedure that closes a large OAF using bone grafting to the involved sinus. This technique involves sinus mucosal lifting via elevating the sinus membrane, which is recovered as a continuous layer by combining the residual sinus membranes with a rotated part of oral mucosa around the OAF. Autogenous bone from the ilium was grafted into the prepared sinus space, and the oral side of the graft was covered by a rotated palatal flap. This technique was used to treat 3 patients who had large OAFs in the atrophied posterior maxillary region owing to previous multiple implant failures after sinus lifting. The treatment was successful in all cases. This technique appears to be suitable for large OAFs where implants are subsequently desired.
   Source: MEDLINE

3. Closure of oroantral communication with buccal fat pad flap in zygomatic implant surgery: a case report.
   Author(s): de Moraes EJ
   Citation: International Journal of Oral & Maxillofacial Implants, January 2008, vol./is. 23/1(143-6), 0882-2786
   Publication Date: January 2008
   Abstract: The scientific literature has demonstrated the use of the buccal fat pad (BFP) flap to cover bone grafts in the correction of maxillary osseous defects and in the closure of oroantral communications. The use of the pedicled BFP flap to provide an immediate blood supply to a recipient site is recommended to provide closure of oroantral communications. The author presents a case report of zygomatic implant
surgery in which the BFP flap technique was used in the closure of an oroantral communication caused by maxillofacial surgery.

Source: MEDLINE

4. **Oroantral fistula and genian mucosal flap: a review of 25 cases.**

**Author(s):** Meirelles RC, Neves-Pinto RM

**Citation:** Revista Brasileira de Otorrinolaringologia, January 2008, vol./is. 74/1(85-90), 1808-8694

**Publication Date:** January 2008

**Abstract:** The oroantral fistula is a pathological connection between the maxillary sinus and with the oral cavity. The condition mostly follows dental extraction. AIM: To present the experience of 25 cases. MATERIAL AND METHODS: Retrospective cases between 1996-2000. The ORL examination included nasal or sinusal endoscopy, a CT scan and histopathological analysis. RESULTS: Twenty-five cases were found: ten 2nd molar cases, eight 1st molar cases, six 2nd premolar cases, and one canine case. All patients underwent a Caldwell-Luc operation plus excision of the epithelium lining the fistula, that was then completely covered by a flap of mucosa rotated from the genian region. DISCUSSION: In cases of major fistulae a bone autograft taken from the anterior sinus wall was used. Bacterial cultures (n=19) revealed streptococcus pneumoniae (13), haemophillus influenza (6), Moraxella catharralis (2) and staphylococcus aureus (2). Aspergillus niger was found in one case presenting as a "fungic ball". CONCLUSIONS: The only case of surgical failure, after 30 days postoperatively, was reoperated, using a bone graft. After a 6-month follow up all of the patients progressed satisfactorily, including the reoperated patient.

Source: MEDLINE

5. **Clinical applications of autologous cryoplatelet gel for the reconstruction of the maxillary sinus. A new approach for the treatment of chronic oro-sinusal fistula.**

**Author(s):** Scala M, Gipponi M, Pasetti S, Dellacha E, Ligorio M, Villa G, Margarino G, Giannini G, Strada P

**Citation:** In Vivo, May 2007, vol./is. 21/3(541-7), 0258-851X

**Publication Date:** May 2007

**Abstract:** The authors report their clinical experience regarding an original method of surgical repair of oro-sinusal communications. From September 1999 to December 2003, 13 patients (7 male and 6 female patients; mean age: 52 years, range: 24-68 years) underwent surgical repair of an oro-antral fistula by means of cryoplatelet gel: in three patients, it was mixed with bioglass granules; in two, it was mixed with Biooss; in three, it was mixed with particulate bone extracted by means of a bone grafter from the oral cavity close to the operative site, with addition of demineralised bovine bone; in three, it was used together with porose hydroxyapatite, and in two patients the cryoplatelet gel was used only. No postoperative complication was reported; primary wound healing was achieved within seven to nine days. A bony orthopantoscintigraphy was performed a few months following the operative procedure, showing an active osteogenic process. In eight patients, a CT was performed after 8 to 12 months from the operation, showing a normal pneumatization with reconstruction of the floor of the maxillary sinus. Although preliminary, these findings seem to suggest that the use of bioengineered materials coupled with growth factors and osteoprogenitor cells may represent a valuable alternative to autologous bone transplantation for the reconstruction of the maxillary sinus.
6. Modified connective tissue flap: A new approach to closure of an oroantral fistula

Author(s): Dergin G., Gurler G., Gursoy B.

Citation: British Journal of Oral and Maxillofacial Surgery, April 2007, vol./is. 45/3(251-252), 0266-4356

Publication Date: April 2007

Source: EMBASE

Full Text: Available in print at Pilgrim Hospital Staff Library

7. Zygomatic bone graft for oral-antral communication closure and implant placement.

Author(s): Penarrocha-Diago M, Garcia B, Gomez D, Balaguer J

Citation: Journal of Oral Implantology, 2007, vol./is. 33/5(305-9), 0160-6972

Publication Date: 2007

Abstract: The roots of molar and premolar maxillary teeth are often very close to the floor of the maxillary sinus. As a result, extraction of these teeth can leave an oral-antral communication or lead to a fistula that requires treatment. A woman with an oral-antral communication secondary to extraction of a maxillary molar is presented. The communication was closed by means of a bone graft harvested from the wall of the sinus (zygomatic bone). After 3 months, 2 dental implants were placed, one in the pterygoid area and the other with parasinusual angulation. Rehabilitation followed in the form of a screw-retained, fixed prosthesis 3 months after implant placement. There have been no complications after 1 year of follow-up. This surgical technique allowed closure of an oral-antral communication produced by molar extraction through placement of a zygomatic bone graft and subsequent placement of 2 dental implants.

Source: MEDLINE

8. Bioabsorbable root analogue for closure of oroantral communications after tooth extraction: a prospective case-cohort study.

Author(s): Thoma K, Pajarola GF, Gratz KW, Schmidlin PR

Citation: Oral Surgery Oral Medicine Oral Pathology Oral Radiology & Endodontics, May 2006, vol./is. 101/5(558-64), 1528-395X

Publication Date: May 2006

Abstract: OBJECTIVE: To assess the clinical capacity of a bioabsorbable root analog to close oroantral perforations after extraction. STUDY DESIGN: In this prospective case-cohort study, 20 consecutive patients with oroantral communications greater than 2 mm were treated with a bioabsorbable root analog (RootReplica). Patients were followed up clinically and radiographically for 3 months to monitor the healing process. RESULTS: Root replicas could be placed in 14 patients, whereas 6 patients required the socket to be covered with a buccal sliding flap. In the latter cases, fragmentary roots or overly large defects prohibited replica fabrication or accurate fitting of the analog, respectively. Healing was uneventful in all patients, and epistaxis, swelling, or
pain was observed only in patients treated with flaps. CONCLUSIONS: The method described is a valuable alternative method with which to close oroantral communications but cannot be performed in all patients because of technical limitations.

Source: MEDLINE


Author(s): Abuabara A, Cortez AL, Passeri LA, de Moraes M, Moreira RW

Citation: International Journal of Oral & Maxillofacial Surgery, February 2006, vol./is. 35/2(155-8), 0901-5027

Publication Date: February 2006

Abstract: This retrospective study analyzed the etiologic factors, location and treatments for patients with oroantral or oronasal communications (OAC or ONC). Data analysis extended to gender, age, etiology, location, type of treatment and short-term complications from January 1988 to May 2004. A total of 112 patients with 101 (90%) OAC and 11 (10%) ONC were included. The main etiology for OAC was tooth extraction (95%) with similar prevalence between right (49%) and left (51%) side. For ONC, pathological conditions (27%) and exodontia (27%) were the most prevalent. For the treatment of OAC, suture was the technique most frequently used (60%), followed by buccal fat pad (28%), buccal flap (9%), palatal flap (2%) and one dental transplant (1%). For ONC, the following treatments were used: suture (46%), buccal flap (36%) and palatal flap (18%). Failure to eliminate the communication occurred in six (6%) patients of the OAC group and three (27%) of the ONC group. The results confirm that tooth extraction was the most common etiologic factor for ONC and OAC. Suture, when the communication was small (3-5 mm), and the use of a buccal fat pad (100% successful), when a larger communication existed (>5 mm), seemed to be the two best choices for treatment.

Source: MEDLINE

10. A new surgical management for oro-antral communication: the resorbable guided tissue regeneration membrane–bone substitute sandwich technique.

Author(s): Ogunsalu C

Citation: West Indian Medical Journal, September 2005, vol./is. 54/4(261-3), 0043-3144

Publication Date: September 2005

Abstract: This paper describes a new technique for the closure of oro-antral fistula/communication, in which both hard tissue (bone) and soft tissue closure is achieved. The sandwich technique utilizes a suitable bone grafting material sandwiched between two sheaths of Biogide (a resorbable membrane) for the hard tissue closure of oro-antral communication post traumatic exodontia. The bone grafting material utilized for this case was Bio-oss. The result obtained was excellent with regeneration of sufficient bony tissue to allow placement of an endosseous implant. This sandwich technique is a simple and excellent technique for the closure of oro-antral communication, especially when subsequent placement of endosseous implant is considered without the need of donor site surgery for bone grafting. The otorhinolaryngologists and oral and maxillofacial surgeons should find this technique very useful in the closure of oro-antral fistulae.

Source: MEDLINE

repair and secondary closure.


Citation: Journal of Oral & Maxillofacial Surgery, September 2005, vol./is. 63/9(1288-94), 0278-2391

Publication Date: September 2005

Abstract: PURPOSE: To evaluate the use of intra-oral bone grafts for closing chronic oro-antral fistulas (OAFs), for providing a sound basis for subsequent conventional sinus lifting and for preserving the teeth adjacent to OAFs. PATIENTS AND METHODS: Twenty-one patients with oro-antral fistulas of variable origin were treated with monocortical bone blocks harvested from the retromolar or interforaminal regions of the mandible. The preoperative treatment, the surgical procedure for both hard and soft tissue closure, and the postoperative management are reviewed in detail. RESULTS: Press-fit closure for repair of the bony sinus floor was sufficient in 17 patients. Four of them needed additional internal fixation. In all 21 patients adequate closure of the fistulas was obtained, although 3 patients (14.3%) developed wound dehiscences at the grafted sites, which healed by secondary intention. Meanwhile, 3 patients underwent successful sinus lifting. CONCLUSION: The use of monocortical bone grafts harvested at intra-oral donor sites is a safe and easy technique for repairing defects of the maxilla, especially OAFs in need of secondary closure. It provides a sound basis for subsequent conventional sinus lifting and preserves the teeth adjacent to OAFs.

Source: MEDLINE

Full Text: Available in print at Pilgrim Hospital Staff Library

12. Surgical correction of oroantral fistulas with integration of mandibular bone. [Spanish] Correccion quirurgica de fistulas oroantrales con injerto oseo mandibular.

Author(s): Delgado Galindez B, Gonzalez Sanchez OJ, Villalpando Carreon M, Albores Zuniga D

Citation: Revista Medica del Instituto Mexicano del Seguro Social, March 2005, vol./is. 43/2(167-72), 0443-5117

Publication Date: March 2005

Abstract: OBJECTIVE: The goal of this study was to formulate a proposal for an alternative surgical technique for treating >3 mm oroantral fistulas by integration of mandibular bone, in an attempt to decrease complications due to its invasive nature. MATERIAL AND METHODS: An observational, descriptive and longitudinal cohort study was carried out in the Maxillofacial Oral Surgery Department in the Specialty Hospital of the 21st Century National Medical Center of the Mexican Institute of Social Security in Mexico City. Sample patients with a diagnosis of oroantral fistula from January 1984 to December 1999 were selected. Surgical correction under general anesthesia was performed with the integration of mandibular osseous graft. Patients were followed postoperatively for 4 years. RESULTS: Of the 22 patients, 13 were male and 9 female, and all were between 25 and 45 years old (average: 35.5 years). They were treated by application of osseous external mandible graft. In most cases, the graft was covered with a sliding mucoperiosteal flap, two were covered with a racquet-type flap and one only one procedure was Von Lagenbeck type because the nasal floor was involved. None of the patients refused the graft. All patients were followed postoperatively, both clinically and radiologically, for 4 years. DISCUSSION: Oroantral communication control is difficult because of mouth fluids, mixed bacterium and a humid environment that promotes development of infection. Therefore, the solution is
complicated. As a consequence, it is thought that a simple technique such as the use of
mandible graft, which offers advantages over others that are performed such as the
application of calotte, rib, iliac crest, and perone grafts, but also implies double surgery
in distant anatomic areas with particular complications in each one and a longer
surgical time. CONCLUSIONS: Whatever the etiology of the oroantral communication,
the fistulas must be treated immediately after diagnosis. Treatment protocol must be
established according to the size and location and presence or absence of infectious
process. Successful treatment is achieved by this process.

Source: MEDLINE

13. **Long-term stability of prosthetic treatment of oronasal and oroantral
communications**

**Author(s):** Bartonova M., Dostalova T., Peterka M., Kozak J., Mullerova Z.

**Citation:** Acta Chirurgiae Plasticae, 2005, vol./is. 47/3(85-91), 0001-5423

**Publication Date:** 2005

**Abstract:** This five-year prospective study demonstrates prosthetic treatment by
multidisciplinary therapy: surgeon, orthodontist, and prosthodontist. 10 patients
volunteered for the study (a group of 7 men and 3 women at an average age of 33.2
years). 10 obturators, 49 fixed dentures were inserted to the upper jaw. Based on ADA
(American Dental Association) recommendation a special card was prepared
containing relevant information on the patients. Clinical assessments were carried out
in accordance with the US Public Health Service System. In a 5-year period only 50.0%
of restorations were excellent, receiving 100% alpha rating. The marginal ridge contour
and adaptation of obturator achieved 60.0% alpha rating. The anatomic form of dental
arch was destroyed in 50.0%. The presence of caries was not detected. Six teeth were
extracted due to periodontal disease. The general contour of the restoration followed
the overall contour of the fixed denture in 95.9%. Plaque accumulation was found in
50%. The colour match of crowns was darker and translucent in 27.7%, but
discoloration of removable denture was seen in 30.0%. The three case reports
demonstrate the long-term stability of treatment (from alpha to charlie evaluation).
Attachment retention, fixed and removable denture with metal base are the first method
of choice, due to acceptable long-term stability.

Source: EMBASE

14. **The buccal fat pad in the closure of oro-antral communications: an illustrated
guide.**

**Author(s):** Scott P, Fabbroni G, Mitchell DA

**Citation:** Dental Update, July 2004, vol./is. 31/6(363-4, 366), 0305-5000

**Publication Date:** July 2004

**Abstract:** This article is intended as an illustrated, step-by-step guide in the use of the
pedicled buccal fat pad in the closure of oro-antral communications. The advantages
and disadvantages of its use are discussed, along with its basic anatomy.

Source: MEDLINE

14. **Use of the serratus anterior free flap to treat a recurrent oroantral fistula.**

**Author(s):** Deune EG, Manson PN

**Citation:** Journal of Craniofacial Surgery, March 2004, vol./is. 15/2(335-40), 1049-
2275
Publication Date: March 2004

Abstract: We describe the successful use of the serratus anterior free muscle flap to obliterate a recurrent oroantral fistula in a 39-year old male who 19 years before this surgery had sustained a high velocity impact to his right face with multiple subsequent corrective surgeries. There was no complication from the serratus anterior free flap surgery and no postoperative scapular winging. The serratus anterior muscle is a versatile flap and ideal for various defects. It should be considered for obliteration of oroantral fistulas when no local or regional tissue is available because of previous surgery or trauma.

Source: MEDLINE

15. Use of pedicled buccal fat pad in the closure of oroantral communication: analysis of 75 cases.

Author(s): Dolanmaz D, Tuz H, Bayraktar S, Metin M, Erdem E, Baykul T

Citation: Quintessence International, March 2004, vol./is. 35/3(241-6), 0033-6572

Publication Date: March 2004

Abstract: OBJECTIVE: This report evaluates the use of pedicled buccal fat pad for closure of oroantral communications. METHOD AND MATERIALS: Seventy-five patients were treated with pedicled buccal fat pad. Fifty-two were treated immediately after tooth extractions. The remaining 23 had chronic oroantral communication and were treated similarly after irrigation of the maxillary sinus with saline for 7 days. RESULTS: The 6-month follow-up revealed uneventful healing in all of the patients. Though partial necrosis of the flap was observed in three patients, this did not effect the final healing. Total necrosis of the flap was not noted. CONCLUSION: The use of pedicled buccal fat pad is an acceptable and reliable alternative in acute or chronic oroantral communications management and may even be used as a first treatment choice by experienced surgeons.

Source: MEDLINE


Author(s): Anavi Y, Gal G, Silfen R, Calderon S

Citation: Oral Surgery Oral Medicine Oral Pathology Oral Radiology & Endodontics, November 2003, vol./is. 96/5(527-34), 1079-2104

Publication Date: November 2003

Abstract: OBJECTIVE: To review our 17-year clinical experience with delayed oroantral fistula repair by palatal rotation-advancement flap, and to report its advantages, disadvantages, and complications. STUDY DESIGN: The records of 63 patients with late oroantral fistula treated by palatal rotation-advancement flap from 1984 to 2002 were reviewed. Eleven had undergone unsuccessful closure with a buccal flap. Data recorded were patient age and sex, cause of fistula, signs and symptoms, interval from appearance of fistula to repair, fistula size, radiographic appearance, method of repair, and immediate and late complications. RESULTS: There were 35 women and 28 men aged 21 to 71 years (mean 50.3 years). Surgery was performed 3 months to 20 years after injury (mean 1.8 years). Twenty-four patients had acute maxillary sinusitis and 39 had chronic sinusitis. The main causes of oroantral fistula were extraction of the second and first molars and pathological lesions within the sinus. Average fistula size was 2.3 cm x 1.6 cm. Fifty-one repairs were preceded by Caldwell-Luc operation. All fistulas were successfully closed with the palatal rotation-advancement flap, with minimal complications on long-term follow-up. CONCLUSION: The palatal rotation-advancement
flap is recommended for the late repair of oroantral fistula owing to its good vascularization, excellent thickness and tissue bulk, and easy accessibility; it also allows for the maintenance of the vestibular-sulcus depth. It is particularly indicated in cases of unsuccessful buccal flap closure.

Source: MEDLINE

17. A preliminary study of monocortical bone grafts for oroantral fistula closure

Author(s): Haas R, Watzak G, Baron M, Tepper G, Mailath G, Watzek G

Citation: Oral Surgery Oral Medicine Oral Pathology Oral Radiology & Endodontics, September 2003, vol./is. 96/3(263-6), 1079-2104

Publication Date: September 2003

Abstract: Sinus floor elevation has become a standard procedure in patients affected by severe maxillary atrophy, before implant placement, provided that the maxillary sinus is intact and uninfected. In the case of an oroantral fistula, simple soft tissue closure may interfere with the process of elevating the Schneiderian membrane. Total regeneration of the bony sinus floor is necessary to prevent disruption of the sinus membrane. In this study, 5 patients with oroantral fistulae of different causes were treated with autogenous monocortical bone blocks harvested from the chin. Press-fit closure for bony repair of the basal maxilla was sufficient in 3 of them. Two patients needed additional internal graft fixation. In the meantime, the 3 aforementioned patients underwent a successful sinus lift procedure. The use of a monocortical bone block for the closure of an oroantral fistula is recommended before internal sinus augmentation.

Source: MEDLINE

18. Treatment of oroantral fistula: experience with 27 cases.

Author(s): Yilmaz T, Suslu AE, Gursel B

Citation: American Journal of Otolaryngology, July 2003, vol./is. 24/4(221-3), 0196-0709

Publication Date: July 2003

Abstract: PURPOSE: To review patients with chronic oroantral and oronasal fistula who underwent surgical correction. MATERIAL AND METHODS: Twenty-seven patients with chronic oroantral and oral fistula who underwent surgical correction in the Hacettepe University Faculty of Medicine Department of Otorhinolaryngology Head and Neck Surgery between 1968 and 2001 were reviewed retrospectively. RESULTS: Local mucosal flaps were used for surgical correction. The underlying factors were tooth extraction in 13 patients (48%), tumor in 5 (18.5%), osteomyelitis in 3 (11%), Caldwell-Luc procedure in 2 (7.5%), trauma in 2 (7.5%), dentiginous cyst in 1(3.7%), and correction of septal perforation in 1 (3.7%). Among the fistulas, 23 were oroantral, 3 were oroantronasal, and 1 was oronasal, respectively. Two patients required revisional repairment. The surgical procedure failed in 1 diabetic patient and 3 patients with prior history of external radiotherapy. CONCLUSION: Tooth extraction was the most common etiologic factor, and malignancy should be excluded in all patients. The outcome may not be satisfactory in patients with systemic disease and in patients with history of radiotherapy. Multiple surgical interventions may be necessary only on rare occasions.

Source: MEDLINE

19. Use of third molar transplantation for closure of the oroantral communication after tooth extraction: a report of 2 cases.
Author(s): Kitagawa Y, Sano K, Nakamura M, Ogasawara T

Citation: Oral Surgery Oral Medicine Oral Pathology Oral Radiology & Endodontics, April 2003, vol./is. 95/4(409-15), 1079-2104

Publication Date: April 2003

Abstract: OBJECTIVE: This clinical report introduces a promising and unique method for the immediate closure of the oroantral communication (OAC) after tooth extraction: the use of the transplanted third molar with closed apices. STUDY DESIGN: In 2 adult patients, OAC caused by the extraction of an upper molar was immediately closed by using a transplanted third molar with complete root formation. After tooth extraction at the recipient site, OAC with perforated mucosa of the sinus floor was confirmed and the donor third molar was transferred to the prepared recipient socket. Endodontic therapy of the transplanted third molar began at 3 weeks after surgery, and prosthetic treatment was completed at 5 months after the operation. These 2 patients were carefully observed both clinically and radiographically. RESULTS: Closure of the OAC was successfully performed, and the transplanted teeth became fixed with the passage of time in these 2 patients. Root resorption did not occur, and good functional results were obtained without any complications. CONCLUSIONS: Tooth transplantation of a mature third molar for closure of the OAC is a simple and excellent method because the transplanted tooth not only closes the communication to the maxillary sinus, but it also satisfactorily functions at the recipient site during mastication, even in adult patients.

Source: MEDLINE

20. Oroantral fistulas: Diagnosis and management purposes

Author(s): Freitas T.M.C., Farias J.G., Mendonca R.G., Alves M.F., Ramos Jr. R.P., Cancio A.V.

Citation: Revista Brasileira de Otorrinolaringologia, 2003, vol./is. 69/6(838-844), 0034-7299

Publication Date: 2003

Abstract: The oroantral communication is one of the accidents most common after dental extractions in posterior maxillary region, involving mainly the first molar. The diagnosis must be realized through radiographic and clinical methods (Valsalva's Maneuver) and the treatment must be effect early, avoiding infection of the sinus and installing itself maxillary sinusitis. The treatment of the previous maxillary sinusitis must be instituted before the oroantral fistula plastic closure. The purpose of the study was to report three clinical cases of oroantral communication, furthermore to direct the professionals to the diagnosis and surgical treatment.

Source: EMBASE


Author(s): Lee JJ, Kok SH, Chang HH, Yang PJ, Hahn LJ, Kuo YS

Citation: International Journal of Oral & Maxillofacial Surgery, December 2002, vol./is. 31/6(677-80), 0901-5027

Publication Date: December 2002

Abstract: Various palatal flap procedures based on the greater palatine vessels have been advocated for the repair of oroantral communications (OACs). However, when the defect is located in the third molar region, difficulty is encountered in using the palatal flap because rotation is hindered by the vascular pedicle. In this study, we used
random palatal flaps to repair OACs in the third molar area in 21 patients. The vascular pedicles were ligated and severed in all cases in order to evaluate whether it was necessary to preserve the greater palatine vessels when using the palatal rotation flap (PRF). The repair was successful in 16 cases (76.2%). The length/width ratio of the flap was the most important factor determining the outcome. The ratios were 2.23 +/- 0.12 and 2.40 +/- 0.14 in the success and failure groups, respectively and their difference was statistically significant (P<0.05). Other clinical parameters such as age, gender, antral infection, tooth displacement into the sinus and duration of the communication had no influence on the outcome (P>0.05). The study showed that the PRF with the appropriate length/width ratio can safely be used in a random fashion. This provided another option in the repair of oroantral communications of difficult locations such as in the tuberosity area.

Source: MEDLINE

22. Oronasal fistula repair.

Author(s): Smith MM

Citation: Clinical Techniques in Small Animal Practice, November 2000, vol./is. 15/4(243-50), 1096-2867

Publication Date: November 2000

Abstract: Oronasal fistula is a relatively common complication associated with maxillary canine tooth extraction, problematic healing of maxillectomy, and repair of secondary cleft palate in small animals. Regardless of the clinical scenario associated with oronasal fistula, therapy requires surgical treatment. Principles for surgical repair of oronasal fistula include development of mucosal flaps with excellent vascular supply to transpose over the defect to restore continuity of the nasal and oral cavities. The specific surgical technique may vary but includes either single or double mucosal flaps. Oronasal fistula refractory to multiple attempts at surgical repair may be obturated by using a prosthodontic device.

Source: MEDLINE

23. Team approach for closure of oroantral and oronasal fistulae.

Author(s): Kraut RA, Smith RV

Citation: Atlas of the Oral & Maxillofacial Surgery Clinics of North America, March 2000, vol./is. 8/1(55-75), 1061-3315

Publication Date: March 2000

Abstract: Oroantral and oronasal fistulas present with a broad range of causation, size, duration, and extent of infection involving the nose and paranasal sinuses. Accurate diagnosis of the extent of the disease with appropriate radiographic evaluation will guide the surgeon to select an approach that addresses all of the infected sites. When significant sinus disease is found, an endoscopic approach to restoring drainage in all of the involved sinuses can promote predictably successful closure of oroantral and oronasal fistulas. The multispecialty team approach to this disease, with the concomitant management of the sinusitis and fistula closure, is a significant advance in the successful management of this chronic condition.

Source: MEDLINE


Author(s): Pandolfi PJ, Yavuzer R, Jackson IT

Citation: International Journal of Oral & Maxillofacial Surgery, February 2000, vol./is.
Abstract: Reconstruction of oroantral defects, which are usually caused by tumor resection, is challenging. These defects become an even more difficult problem when they comprise multiple layers including oral mucosa, subcutaneous tissue, muscle and skin. This paper describes such a case in which a three-layer closure using a palatal flap, a buccal fat pad flap and a local skin flap was successfully performed.

Source: MEDLINE