

Information of Mentor of Training Centre
It shall be verified by the Head of the concerned Training Center

Sr. No.	Particular	-	Information to be filled
01.	Name of the Mentor	:	Dr. Adil Gandevala
02.	Date of Birth	:	28/11/1985
03.	Address	:	13/A Jaliwala Mansion, 1 st floor, Banganga Road, Walkeshwar Rd, Mumbai-400006
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05.	e-mail id	:	dr.adilg@gmail.com
06.	Nationality	:	Indian
07.	Qualification in details : (attach documentary proof)	:	BDS-2007 MDS-2012
08.	Teaching experience/ Health science: Profession experience /Consultant/Mentor (attached document proof with signature of Head)	:	9yrs. 6m. 13dys
09.	Present Appointment	:	Reader
10.	Publications (List & Proof)	:	<ol style="list-style-type: none"> 1. Moving forward in time of COVID -19 pandemic – Oral & Maxillofacial Surgical, Dr. Aatif Riaz Sayed, Dr.Sajjad Salam, Dr. Adil Gandevala, Dr. PrernaAgrawal, Dr. Furkan Ahmed Khan, Dr. Atul Arunrao Sanap. National Journal of Maxillofacial Surgery 2. Natarajan S, Baviskar P, Gandevala A, Gupta H, Vichare S.Traumatic optic neuropathy in Orbital wall fractures- Diagnostic parameters and treatment outcomes: A Prspective Observational Study. Journal of Stomatology Oral and Maxillofacial Surgery. 2021 3. Sushrut Vaidya, Srivalli Natarajan, Usha Asnani, Nitesh Patkar, Adil Gandevala. A Rare Occurrence of mucous retention cyst in mid cheek region: A Case Report. Int Arch Oral Maxillofac Surg 2019. 4. Dr. Imraj M Khalid, Dr.Usha s. Asnani, Dr. Srivalli N.Natarajan, Dr. Adil Gandevala , Dr. Suraj Ahuja, Dr. Abhishek S. Dutta Though rare but there: Gates-Glidden drill finds a gateway to antrum January 22, 2019 5. Vibhuti Mhatre, Jigna Pathak, Shilpa Patel, Niharika Swain, Adil Gandevala - Diffuse Lipomatosis of Face – Journal of Contemporary Dentistry – September – December – 2017; 7(3) ; 185 - 187 6. Gandevala A , Sangle A, Shah D, Tejnani A, Sayyed A, khutwad G, et al. Autologous platelet-rich plasma after thirdmolar sugery. Ann maxillofac Surg 2017;7:245-9 7. Bhandarwar AU, Patel S, Pathak J, Swain N, Gandevala A. Postsurgical Epidermal Inclusion Cyst in the Cheek Region. J Contemp Dent 2017;7(3):178-180. 8. Sidana S Mistry, Gandevala A, Motwani N – Evaluation of the Need for antibiotic prophylaxis during routine Intra- alveolar Dental Extractions in Health Patients : a Randomized Double- Blind controlled Trial – Journal of Evidence Based Dental Practic – April – 2017.

10.	Publications (List & Proof)	9.	Dr. Adil Gandevala , Dinesh H Shah, Sunil Sidana, Akram Khan - Modified Rhomboid Flap for Reconstruction of Defect of Cheek after Excision of Basal Cell Carcinoma – Journal of Contemporary Dentistry – May – August – 2016 Vol- 6 (2) – 154-156
		9.	Dr. Adil Gandevala – Surgical Correction Of Ankyloglossia With Four – Flap Z- Frenuloplasty - GUIDENT – Your Guide on the path of Dentistry – vol- 7, Issue- 7 June - 2016
		10.	Dr. Sunil Sidana, Dr. Shah Dineshbhai Himmatlal, Dr. Adil Gandevala - Coronal Approach – A Simple And Cosmetic Approach To Craniofacial Fractures – Famdent Practical Dentistry Handbook Vol. 16 Issue 3 Jan- Mar – 2016 – 68-72
		11.	Shshrut Vaidya, Sunil Sindana, Adil Gandevala , Ashvin Wagh - A Rare case of complex odontome in posterior maxilla – Journal Dent Res Rev 2015;2:82-5
		12.	Adil Gandevala , Bandish Parekh, Gaurav Poplai, Aliya Sayad - Surgical Removal of Fractured Endodontic Instrument in the Periapex of Mandibular First Molar – Journal of International Oral Health Jan-April - 2014 ; 6(4) : 85-88
		13.	Tejnani A, Gandevala A , Bhanushali D, Gourkhede S. Combined treatment for a Combined enlargement. J Indian Soc Periodontol. 2014 Jul;18(4):516-519.
		14.	Adil Gandevala , Satyajit Dandagi, Amit Sangle, Arun Tambuwala - Management of dentigerous cyst with pathological fracture of the mandible - Journal of Dental & Ora-facial Research Jan- Jun -2014 :10(1)
		15.	Sangle A., Adil Gandevala , Sayed A., Sayed A., Radicular Cyst – A Case Report of a Comprehensive Management. – Universal Research Journal of Dentistry. Jan-April 2012;2(1):25-28.
		16.	Adil Gandevala , Kaul DD, Gupta AK, Tembey AS.– Premaxillary Alveolar Recontouring – A Case Report of Secondary Alveoplasty – Universal Research Journal of Dentistry. Sep-Dec 2011;1(1):46-48.
		17.	Smita Sonavane, Usha Asnani, Adil Gandevala – Retrieval of Foreign Object from Maxillary antrum – A Case Report.– JIDA. Jan 2011; 5(1):162-163.
18.	Deepak K., Adil Gandevala , Suyash S. – Management of Multiple teeth Avulsion – Indian Journal of Dental Advancements. July-Sep 2010; 2(3):291-293.		
11.	Post Graduate Teaching experience (Attach documentary evidence)	:	1 year 11 months 7 dys.
12.	Any other relevant information	:	-

Dr. Adil Gandevala
Name & Sign. of Mentor

Date: 20 / 05 / 2022

I have verified the eligibility of the above Director as per the criteria of eligibility prescribed by the University vide clause no.7 of the University Direction No. 05/2017 (Amended).

S. Sonvaly
Sign & Stamp
Head of the Department
Date: 20/05/2022



S. Sonvaly
Sign & Stamp
Dean/ Principal/ Director of Training Centre
Date: 20/05/2022

Training Centre Round Seal

**MAHARASHTRA UNIVERSITY
OF HEALTH SCIENCES, NASHIK**

We, the Chancellor, the Pro-Chancellor,
the Vice-Chancellor, the Members of the
Management Council and the Academic
Council of the Maharashtra University of
Health Sciences, Nashik,
certify that

Shri/Smt. GANDEVIVALA ADIL MAZHER.

of M.G.M.'s Dental College & Hospital,
Kamothe, Navi Mumbai

having been examined and found
duly qualified for the

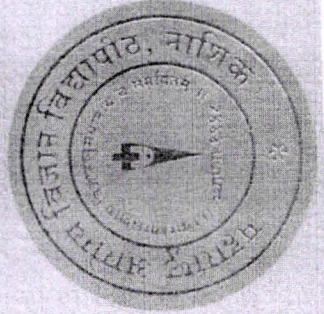
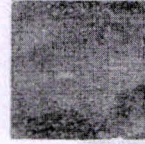
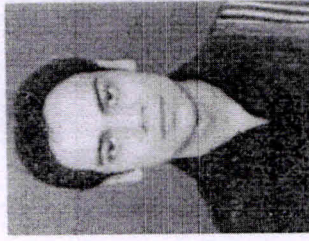
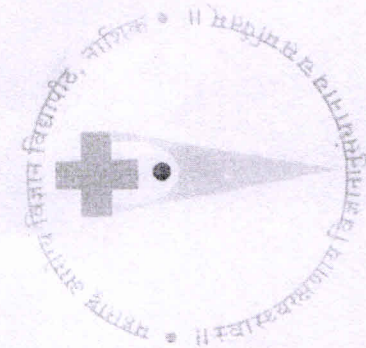
*Bachelor of
Dental Surgery*

in June-2007
the said Degree has been
conferred on him / her.
In testimony whereof is set
the seal of the said University.

PRN 0204190350

25th May 2009

mmazher
VICE-CHANCELLOR



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व्यवस्थापन परिषद व विद्यापरिषद सदस्य
प्रमाणित करतो की,
कामोठे, नवी मुंबई येथील महात्मा गांधी
मिशनचे दंत महाविद्यालय आणि
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गंदेवीवाला अदिल मझर

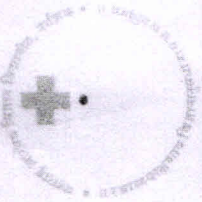
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दंतशल्य स्नातक

परीक्षा उत्तीर्ण झाल्याबद्दल त्यांना
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MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

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We

the Chancellor, Pro-Chancellor,
Vice-Chancellor

and

Members of the Management Council,
Academic Council
confer the Degree of

**Master of Dental Surgery In Oral and
Maxillofacial Surgery**

on

Gandevivala Adil Mazher
(PRN 2812116459)

of

**M. C. F. Society's M. A. Rangoonwala College of Dental
Sciences & Research Centre, Pune**

for the examination held in Summer-2012
at the Convocation
held on 5th October, 2012

आम्ही,

कुलपती, प्र.कुलपती,

कुलगुरु

आणि

व्यवस्थापन परिषद व

विद्यापीठदेचे सदस्य

मुखशाल्य शास्त्र



ही पदवी उन्हाळी-२०१२ मधील परीक्षेत उत्तीर्ण

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गनडेविवाला अदिल मझहर

यांना

०५ ऑक्टोबर, २०१२ च्या

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VICE-CHANCELLOR / कुलगुरु



MAHATMA GANDHI MISSION DENTAL COLLEGE & HOSPITAL
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Dr. Srivalli Natarajan
Dean

No.MGM/DCH/794/2022

Tel: 022- 27436604
022-27433185

Date: 20/05/2022

Experience Certificate

This is to certify that Dr. Adil Gandevivala. is working in the Department of Oral & Maxillofacial Surgery in MGM Dental College & Hospital, Kamothe, Navi Mumbai and his experience is as under :

- Sr. Resident – 16/10/2012 to 31/05/2013
- Lecturer – 01/06/2013 to 09/01/2018
- Reader – 10/01/2018 to Till Date



S. Srivalli
Dean

महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक
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डॉ. कलिदास द. चव्हाण
एम.बी.बी.एस., एम.डी. (न्यायवैद्यकशास्त्र), पीएच.डी., डी.एस्सी.
मुख्याधिकारी

Dr. Kalidas D. Chavan
M.B.B.S., M.D.(Forensic Medicine)Ph.D.,D.sc.
Registrar

Ref No.: MUHS/E-2/PG/274/2021

Date: 05/09/2021

To
The Principal,
Mahatma Gandhi Mission's
Dental College & Hospital,
Junction of NH-4 & Sion-Panvel,
Expressway, Sector-1, Kamothe,
Navi Mumbai - 410 209

Sub: * Regarding extension to Post Graduate Teacher Recognition

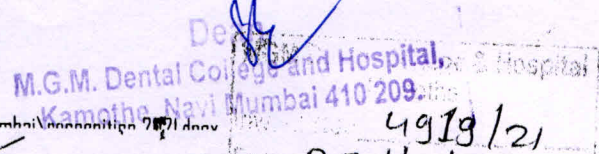
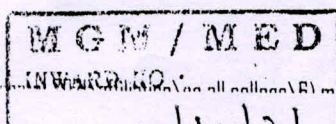
- Ref: 1. University Direction No. 01/2017
2. MUHS/E-2/PG/2203/2020 dated 25/11/2020
3. MUHS/PG/E-2/111105/1559/2019 dated 28/11/2019.
4. MUHS/E-2/ UG /2515/2021 dated 14/09/2021
5. Your letter No MGM/DCH/1034/2021 dated 22/09/2021

Sir/ Madam,

With reference to the subject cited above, I am to inform you that, the proposal of extension to recognition as Post-Graduate Teacher of the following teachers have been considered by the University subject to the terms and conditions of appointment order for imparting instructions to the Post Graduate Degree, Diploma or Super-Speciality Course in the subject mentioned against their names.

Sr. No.	Subject	Name of the Teacher	Designation	Status of PG recognition
1.	Orthodontics & Dentofacial Orthopedics	Dr. Ravindranath V.K.	Professor	w.e.f 30/07/2021 to 29/07/2022 only.
2.		Dr. Amol Mhatre	Reader	w.e.f 02/08/2021 to 01/08/2022 only. (against SC Category)
3.	Oral & Maxillofacial Surgery	Dr. Sunil Sidana	Reader	w.e.f 30/07/2021 to 29/07/2022 only.
4.		Dr. Sagar Vaishampayan	Reader	w.e.f 02/08/2021 to 01/08/2022 only (against SC Category)
5.		Dr. Adil Gandevivala	Reader	w.e.f 02/08/2021 to 01/08/2022 only (against ST Category)
6.	Conservative Dentistry and Endodontics	Dr. Divya Naik	Reader	w.e.f 02/08/2021 to 01/08/2022 only.
7.		Dr. Anuradha Patil	Reader	w.e.f 30/07/2021 to 29/07/2022 only.
8.	Prosthodontics and Crown & Bridge	Dr. Anuradha Mohite	Reader	w.e.f 02/08/2021 to 01/08/2022 only. (against SC Category)
9.		Dr. Janani Vivek Iyer	Reader	w.e.f 30/07/2021 to 29/07/2022 only.
10.	Periodontology	Dr. Sarika Shetty	Reader	w.e.f 02/08/2021 to 01/08/2022 only. (against SC Category)
11.		Dr. Sujeet Khiste	Reader	w.e.f 02/08/2021 to 01/08/2022 only.

- 1) The above mentioned teachers are required to attend "Research Methodology Workshop" conducted by Regional Centre, Pune of this University or any other centre authorised by the University (if not attended earlier), within a period of one year from the date of recognition. It is clarified that the validity of 'Research Methodology Workshop' is for five years only and it must be renewed after every five years as per Circular 14/2011 dated 23/06/2011.



Lesions in the Parotidomasseteric Domain: A Plethora of Diversity

Srivalli Natarajan, Yash Ashok Oswal, Adil Gandevivala, Padmakar Sudhakar Baviskar, Sagar S. Vaishampayan, Sushrut Vaidya, Gaurav Deshpande, Sunil Omprakash Sidana

Department of Oral and Maxillofacial Surgery, MGM Dental College and Hospital, Navi Mumbai, Maharashtra, India

Abstract

Context: Swellings in parotidomasseteric region are one of the most intriguing and challenging lesions in the head and neck. Diverse array of diagnosis, striking clinical similarities between different pathologies and anatomical complexity of this region make parotidomasseteric lesions unique. **Aims:** This article aims to provide a detailed description of various pathologies associated, the diagnostic challenges posed, and the respective management strategies. **Settings and Design:** The study design involves retrospective observational. **Subjects and Methods:** Sixteen rare cases of various parotidomasseteric pathologies were reviewed to delineate clinical presentation and characteristic features in diagnostic investigations and subsequent treatment strategies. **Statistical Analysis Used:** Not applicable. **Results:** The analysis showed that lesions in the parotidomasseteric region can be categorized into specific entities with distinct but often overlapping clinical features. Given the location and anatomy of the parotidomasseteric region, these lesions can often remain indolent. Investigations are fruitful to some extent in determining the expanse of these lesions, however, remain inconclusive in diagnosing the origin and their true nature. **Conclusions:** The authors conclude that a systematic approach to the diagnosis of a parotidomasseteric lesion is of utmost importance because the differential diagnosis is prodigious. These lesions can be considered very deceptive, demanding surgical intervention and their excision. With the exception of surgical exploration, physical examination remains the most indispensable tool. Hence, a better classification system which determines the treatment required for a particular parotidomasseteric lesion and which correlates the clinical findings with the preoperative investigations will be more beneficial for the operating surgeon.

Keywords: Differential diagnosis, parotid gland, parotidectomy, parotidomasseteric lesion, preauricular

INTRODUCTION

Parotidomasseteric region is an area bounded anteriorly by the anterior border of the ascending mandibular ramus, posteriorly by the external auditory canal, mastoid process, and upper portion of the sternocleidomastoid muscle, superiorly by the zygomatic arch and inferiorly by the inferior border of the mandible.^[1] Swellings in parotidomasseteric region are one of the most intriguing and challenging lesions in the head and neck due to numerous peculiarities. Varied clinical features, together with the relative rarity of a number of parotidomasseteric lesions makes them exceptional. This article, therefore, discusses a variety of parotidomasseteric pathologies, the diagnostic challenge posed, and respective management strategies.

Submitted: 09-Mar-2020 Revised: ???
Accepted: ??? Published: ***

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10.4103/jdmimsu.jdmimsu_59_20

SUBJECTS AND METHODS

A retrospective analysis of 16 patients treated in the Department of Oral and Maxillofacial Surgery, with various parotidomasseteric pathologies between January 2015 and June 2017 were evaluated with complete clinical examination and detailed diagnostic investigations. The patients were included in the study based on the peculiar features of their swellings. The study was exempted by the institutional ethical committee for being a retrospective analysis, and patient identity has not been revealed in the manuscript. Patients with incomplete

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How to cite this article: Natarajan S, Oswal YA, Gandevivala A, Baviskar PS, Vaishampayan SS, Vaidya S, *et al.* Lesions in the parotidomasseteric domain: A plethora of diversity. J Datta Meghe Inst Med Sci Univ 2020;XX:XX-XX

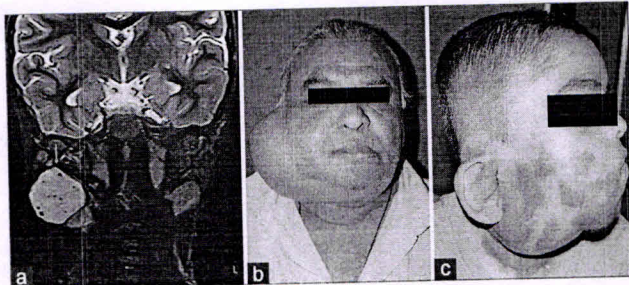


Figure 7: (a) T2-weighted postcontrast magnetic resonance imaging of right parotid hemangioma showing sequential centripetal enhancement of hyperintense lesion with multiple calcified foci. (b) Frontal view of high-grade carcinoma ex pleomorphic adenoma of right parotid gland. (c) Right profile view of neurofibromatosis of facial nerve

Any patient presenting with a parotidomasseteric swelling should undergo a comprehensive history and detailed physical examination. It is crucial to delineate the duration, onset, size changes over time, and laterality of the swelling. Associated symptoms such as pain, facial nerve weakness, overlying skin changes (draining sinus, erythema, oedema), purulent discharge from within the mouth or external auditory canal, dry eyes or fevers and chills, xerostomia, tender TMJs should also be elucidated. Alleviating and exacerbating factors for each associated symptom should be elicited. A recent history of trauma, when applicable, is important to note.^[2]

Examination of the parotidomasseteric lesion involves delineating its physical characteristics and anatomic relationships. A meticulous extraoral, intraoral, TMJ and auricular examination is a desideratum.

In a large proportion of cases, a complete physical examination in conjunction with a solid history is sufficient to arrive at a provisional diagnosis.^[22]

Given the location and anatomy of the parotidomasseteric region, these lesions can often remain indolent.^[6] Investigations are fruitful to some extent in determining the expanse of these lesions but are inconclusive in diagnosing the origin and their true nature. Hence these lesions are considered very deceptive demanding surgical exploration and their excision. Definitive diagnosis can be established only after histopathological examination of the excised mass. This is especially true when dealing with parotid masses. A minimum biopsy for parotid mass is to perform superficial parotidectomy. It implies that the most conservative treatment itself is radical; sacrificing the entire lobe just to arrive at a final diagnosis.^[23] However, no single diagnostic modality is accepted unequivocally as a definitive approach to these lesions. Low-cost modalities such as USG and FNAC may be used as a first-line tool, whereas CT, MRI, and other more advanced imaging methods are the workhorses for most tumor characterization and treatment planning.^[6,24,25]

An unerring histopathological diagnosis is fundamental and is often the limiting factor in clinical practice, both as far as concerns the unrivalled management and for the evaluation of the results of treatment.^[4]

The inevitable conclusion is that a systematic approach to the diagnosis of a parotidomasseteric lesion is of utmost importance because the differential diagnosis is prodigious. Clanger can be evaded by adequate anamnesis, physical examination, imaging, and propitious treatment. With the exception of surgical exploration, physical examination remains the most indispensable tool for the experienced surgeon.

Despite the compendium of literature available on various parotidomasseteric lesions and their management, there is the paucity of information which focuses on a treatment-oriented approach to these swellings rather than a histological approach. Hence, a better classification system that determines the treatment required for a particular parotidomasseteric lesion and which co-relates the clinical findings with the preoperative investigations will be more beneficial for the operating surgeon.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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CASE REPORT

A Rare Occurrence of Mucous Retention Cyst in Midcheek Region - A Case Report

Sushrut Vaidya, Srivalli Natarajan, Usha Asnani, Nitesh D Patkar* and Adil Gandevivala

Department of Oral and Maxillofacial Surgery, MGM Dental College & Hospital, India

*Corresponding author: Nitesh D Patkar, Post-graduate Student, Department of Oral and Maxillofacial Surgery, MGM Dental College & Hospital, Navi Mumbai, India



Abstract

Cystic lesions of the minor salivary glands are very common. These lesions are referred to clinically and collectively as mucoceles and can be of either the extravasation or the retention type. Intraoral retention phenomenon is quite common but the presence of retention cyst extraorally mimicking as midcheek mass is rare. These lesions often arise from the salivary glands, but can also originate from the muscles, buccal fat pad, or other structures. We report a case of 40-year-old female presented to our department with lateral facial swelling which was diagnosed as mucous retention cyst on cytology and confirmed on histopathology after excision of the cyst via intraoral approach.

Keywords

Mucocele, Mucous retention cyst, Extravasation cyst

Introduction

Mucous retention cysts (extravasation type, mucoceles) are oral lesions most commonly diagnosed during routine surgical pathology service for dental practice. Extravasation mucous cyst results from a broken salivary gland duct and consequent spillage into the soft tissue thereby forming a mucous pool surrounded by granulation tissue with no epithelial lining. Mucous retention cyst appears due to decreased glandular secretion resulting from dilatation of duct [1,2]. The only histological difference between the retention cyst from extravasation type is the presence of epithelial lining. Thereby we report a case of retention cyst with a predominant lateral facial swelling.

Case Report

A 40-year-old female reported to our department

with a complaint of an asymptomatic swelling on the right side of the face. Patient gave history of similar swelling, much smaller in size 1 month back that regress on aspiration and relapsed in 2-3 days on its own. Patient had experience this twice in past 1 month. Medical history of the patient did not reveal any significant finding. Patient could not relate the occurrence of swelling to any event namely trauma, meals, dental pain, fever, etc. Incidentally, patient experienced increase in swelling while having his meals during this period. On examination, a diffuse swelling of about 6 × 4 cm extended from zygomatic arch to right lower border of mandible (supero-inferiorly) and from right oral commissure to the anterior border of masseter (anteroposteriorly) (Figure 1).



Figure 1: Pre-operative profile.

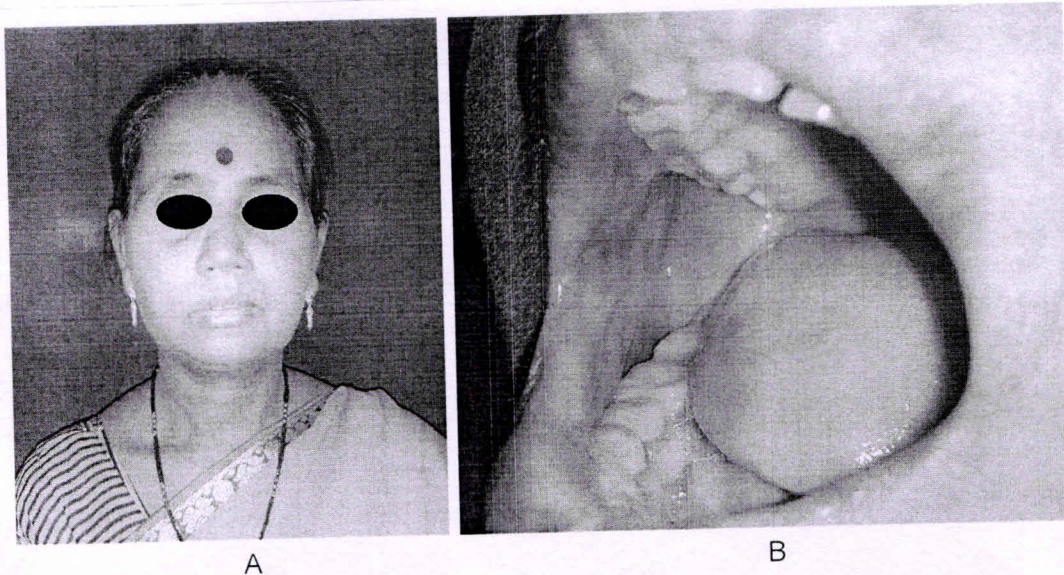


Figure 7: Follow up with no recurrence.

cysts occur in older individuals; the peak prevalence occurs in persons aged 50 - 60 years. The most common site of occurrence is the lower lip followed by tongue, floor of mouth (ranula), and the buccal mucosa.

Mucous extravasation results from rupture of minor or major salivary duct due to trauma. Irrespective of the cause, extravasation leads to mucin pool in tissue spaces and elicits inflammatory response. Granulation tissue forms around the mucin and encapsulation occurs to form a pseudocyst. When this extravasation occurs in superficial tissue planes, it clinically presents as a fluctuant, painless and bluish swelling in the region of lower lip, floor of the mouth, ventral tongue or buccal mucosa. Other regions such as the palate, retromolar region and submandibular gland are rare sites for extravasation probably due to low susceptibility to trauma [3].

The mucous retention phenomenon occurs as a result of obstruction of the duct by a sialolith or a stricture. The hindrance in the flow of saliva from gland to the oral cavity leads to its accumulation in duct and back pressure. The flow from gland continues, and this causes gradual inflation of ductal diameter to accommodate the salivary volume. The pooled saliva is walled by inflated duct making the picture resemble a cystic pathology. It is more of a true cyst, as there is the presence of an epithelium lining. Back pressure may inflame the gland and cause acute/chronic recurrent sialadenitis. The signs and symptoms and management vary with the type of gland involved and the anatomical position of obstruction.

The clinical appearance of a mucus cyst is a distinct, fluctuant, painless swelling of the mucosa. About 75% of the lesions are smaller than 1 cm in diameter; however, rarely, the size can vary from few millimeters to several

centimeters. Superficial lesions take on a bluish to translucent hue, whereas deep lesions have normal mucosal coloration and bleeding into the swelling may impart a bright red and vascular appearance. The patient may relate a history of recent or past trauma to the mouth or face or the patient may have a habit of biting the lip. The various differential diagnoses are Blandin and Nuhn mucocele, oral hemangioma, oral lymphangioma, lipoma, and soft tissue abscess [4].

Fine-needle aspiration cytology (FNAC) and MRI are more useful for the diagnosis. FNAC invariably gives high amylase content, and microscopic examination would present as inflammatory cells in mucoid background. MRI serves two purposes. First, it narrows down the differential diagnosis and second, it helps to localize the gland involved with exact dimensions and planes of the lesion.

Conclusion

Mucous retention cyst are a common phenomenon, however their occurrence as midcheek mass is not quite common. These lesions often arise from the salivary glands, but can also originate from the muscles, buccal fat pad, or other structures. Surgical excision of the entire cystic mass has been suggested as the comprehensive line of management. The excised tissue should be submitted to the pathological investigations to confirm the diagnosis. Laser ablation, cryosurgery, and electrocautery are approaches that have also been used for treatment of the conventional mucoceles, with variable success [5,6].

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Though rare but there: Gates–Glidden drill finds a gateway to antrum

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Received 11 June 2018
Accepted 26 September 2018

Tanta Dental Journal
2018, 15:266–269

Gates–Glidden drills are commonly used endodontic instruments which facilitate the development of a straight-line access and coronal enlargement of the root canal. Its prime safety feature is that if the separation of the drill ever occurs during use, the drills are designed in a fashion that it separates near the hub of the drill at the junction of the shank and head to allow easy retrieval of the fractured segment. In this paper, we present an unusual case of a radiopaque structure at the apex of the palatal root with 17 extruding into the maxillary sinus suggestive of an endodontic instrument separation. Three-dimensional images from CBCT scan revealed a 2.1 cm long hyper dense image with well-defined margins within the right maxillary sinus. The patient underwent a Caldwell–Luc approach for removal of the foreign object, which on retrieval was found to be a Gates–Glidden drill. Following the retrieval, the patient remained asymptomatic and the offending tooth was endodontically rehabilitated. Any foreign object should be considered for removal in order to prevent possible sinus diseases. The extrusion of a Gates–Glidden drill into the maxillary sinus is rarely reported in literature. Our aim is to make the readers aware of the rare occurrence of fractured and displaced Gates–Glidden drill in the maxillary antrum in which case Caldwell–Luc approach is safe and reliable technique to retrieve.

Keywords:

Caldwell–Luc, foreign body, Gates–Glidden drill, maxillary sinus

Tanta Dental Journal 15:266–269
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1687-8574

Introduction

Various types of foreign bodies in the maxillary sinus have been found across literature including tooth roots, burs, dental impression material, root-filling materials, dental implants, and needles [1]. Fracture of the endodontic instrument during root canal procedure is a taxing and generally interferes with efficient cleaning and shaping of the root canal or act as an irritant to the periapical tissues especially when some part of the separated fragment extrudes from the root apex [2–4], instrument separation may be attributed to improper or excessive use, inadequate access, root canal anatomy, inherent physical properties and possible manufacturing defects [3–5]. Although some objects remain asymptomatic, others result in chronic sinusitis because of invasion by highly virulent bacteria from the oral cavity into the sinus [1], as systemic and local conditions of patients differ in each case [6].

The major complication due to a foreign body in the maxillary sinus reported in the literature is sinusitis that may bring more serious conditions such as pansinusitis, panophthalmitis, and orbital cellulitis [7–9].

Two main treatment modalities have been proposed for the removal of displaced implants in the sinuses

and to treat the associated infectious complications: an intraoral approach with the creation of a window in the anterior-lateral wall of the maxillary sinus and a transnasal approach with functional endoscopic sinus surgery [7,10–13].

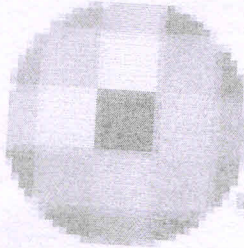
In this case report, we present an unusual case of a large metallic foreign body of endodontic origin was removed from the maxillary sinus via Caldwell–Luc procedure, which on retrieval was found to be a Gates–Glidden drill.

Case report

A 62-year-old male reported to us with a complaint of diffuse pain with the upper right back region of jaw since 1–2 weeks. The dental history revealed that patient was apparently alright 2 weeks back when he experienced pain with a tooth in the upper right back region of the jaw for which root canal treatment had been initiated with 16 and 17 after which was

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Diffuse Lipomatosis of Face

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ABSTRACT

Congenital infiltrating lipomatosis is a distinct clinicopathological entity. It is a type of lipomatosis that is usually found at birth or early after birth. It is designated by a collection of nonencapsulated, mature adipocytes that infiltrate local tissues, leading to craniofacial deformities. Due to its diffuse infiltration and involvement of important facial structures, a complete surgical excision is often impossible. We report a case of a 5-year-old female patient presenting with a painless swelling on the left side of her face.

Keywords: Diffuse lipomatosis, Infiltrating lipomatosis, Lipomatous tumor.

How to cite this article: Mhatre VS, Pathak J, Patel S, Swain N, Gandevala A. Diffuse Lipomatosis of Face. *J Contemp Dent* 2017;7(3):185-187.

Source of support: Nil

Conflict of interest: None

INTRODUCTION

Congenital infiltrating lipomatosis is a distinct clinicopathological entity. It is a type of lipomatosis that is usually found at birth or early after birth.¹ It comes under the subset of lipomatous tumor-like lesions and is designated by collection of nonencapsulated, mature adipocytes that infiltrate local tissues, leading to craniofacial deformities and is prone to recur postsurgery.² The tumor-like lesion is congenital in origin and presents in infancy or early childhood as unilateral facial asymmetry.³ Until date, fewer than 50 cases have been reported in English literature.^{2,4} We report a case of a 5-year-old female patient presenting with a painless swelling on the left side of her face.

CASE REPORT

A 5-year-old female patient reported to our department with a chief complaint of a painless swelling on the left middle and lower third of the face. The swelling was noticed by her parents at birth and was gradually increasing in size with age. Patient did not have any difficulty in speech or loss of hearing. There was no other relevant history.

Extraoral examination revealed gross facial asymmetry due to a solitary diffuse swelling on the left side of the face, extending from left zygomatic arch up to the left inferior border of the mandible (Fig. 1). Borders were indistinct and the skin over the swelling was normal. On palpation, there was no increase in surface temperature and the swelling was soft, nontender, noncompressible, and nonpulsatile. No lymph nodes were palpable. Magnetic resonance imaging of the patient showed hyperintense lesion obliterating left maxillary sinus in T1 images with subcutaneous fat deposition. Based on these findings, a provisional diagnosis of congenital diffuse lipomatosis was made. Patient was referred to the Department of Oral & Maxillofacial Surgery for biopsy.

Grossly, several bits of soft tissue were received with the largest rectangular bit, blackish white color, measuring 2.5 × 1.0 × 1.0 cm. Histopathological examination revealed hematoxylin and eosin-stained soft tissue section showing sinus lining comprising ciliated pseudostratified squamous epithelium with focal hyperplasia. The underlying connective tissue stroma showed varying degrees of inflammatory cell infiltration, minor salivary

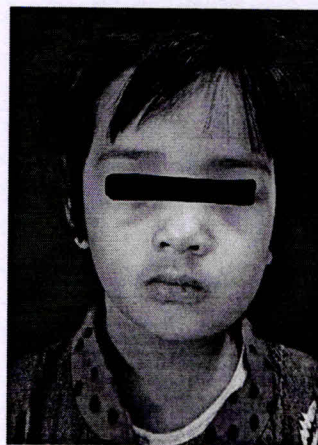


Fig. 1: Clinical photograph of a patient with unilateral facial swelling on the left side

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The histopathologic features include a nonencapsulated lesion with proliferating mature adipose tissue, which is surrounded by a dense capillary network. There is diffuse infiltration of adjacent soft tissue and presence of fibrous tissue with various nerve bundles and thickened wall vessels. The absence of lipoblasts and signs of malignancy despite a rapid growth rate is observed. It may also show hypertrophy of subjacent bone.^{1,3,7} Our case also revealed unencapsulated lesional tissue comprising lobular arrangement of adipocytes with infiltration to surrounding structures.

The treatment options available are liposuction and surgical excision. Treatment is primarily for esthetic reasons.^{11,18,19} Although the tumors are benign, the rate of recurrence is very high, up to 58.6% after surgical excision.¹⁰

CONCLUSION

Congenital infiltrating lipomatosis of the face is a rare benign disorder of lipomatous tissue in infancy or childhood. When patients with facial asymmetry are reported, this should be considered. Thorough clinical examination, imaging studies, and histopathological examination help in the appropriate diagnosis. The chief motive of surgery is to improve the cosmetic appearance of the face rather than to eradicate the tumor.

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Autologous Platelet-rich Plasma after Third Molar Surgery

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Abstract

Aim and Objective: The aim of this study is to compare the efficacy of autologous platelet-rich plasma (PRP) in the third molar impactions, with respect to: pain, swelling, healing, and periodontal status distal to the second molar in patients who need surgical removal of bilateral impacted mandibular third molars. **Materials and Methods:** Twenty-five patients of both sexes aged between 16 and 60 years who required bilateral surgical removal of their impacted third molars and met the inclusion criteria were included in the study. After surgical extraction of the third molar, primary closure was performed in the control group, whereas PRP was placed in the socket followed by primary closure in the case group. The outcome variables were pain, swelling, wound healing, and periodontal probe depth that were follow-up period of 2 months. Quantitative data are presented as mean. Statistical significance was checked by *t*-test. **Results:** There was a difference in the pain (0.071) and facial swelling (0.184), reduction between test and control on day 3, but it was not found to be significant. Periodontal pocket depth (0.001) and wound healing (0.001) less in case group compared with the control group was found to be significant. **Conclusion:** The use of PRP lessens the severity of immediate postoperative sequelae and decreases preoperative pocket depth.

Keywords: Growth factor, Platelet-rich plasma, third molar

INTRODUCTION

Third molars are the teeth that are most commonly impacted. Third molars are present in 90% of the population with 33% having at least one impacted third molar, and these impactions are probably the result of both genetic and environmental factors.^[1] An impacted tooth can cause the patient mild to serious problems if it remains in the unerupted state. However, surgical removal of impacted third molars is one of the most frequently performed surgical procedure to treat pathosis caused by impacted teeth. The procedure requires sound understanding of surgical principles along with patient management skills. Although it is a minor surgical procedure, its relation to adjacent soft tissues, vital teeth, and neurovascular bundle makes it a complex procedure. Periodontal pocket formation on the distal of mandibular second molar and subsequent cementum exposure following the removal of partially erupted or impacted 3rd molars has been a problem in oral and maxillofacial surgical practice.^[2-5] Management is usually directed at periodontal maintenance distal to the second molar and at prevention of osseous defects created by the surgical removal of third molar.^[6] Healing

is a complex process which involves participation of many cell types and growth factors. The platelets, activated by coagulation cascade particularly thrombin and subendothelial collagen, release a number of growth factors from their alpha granules into the wound site.^[7]

Platelet-rich plasma (PRP) is an autologous concentrate of platelets suspended in plasma.^[8-10] It is a proven source of growth factors such as platelet-derived growth factors and transforming growth factor β 1 and 2, which is obtained by sequestering and concentrating platelets by gradient-density centrifugation.^[11,12] By combining with calcium chloride and thrombin, PRP releases these growth factors. PRP gel also contains a native concentration of fibrinogen. As a result, it permits stabilized coagulation of blood, thereby favoring regeneration of osseous defects particularly in the early stages.

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How to cite this article: Gandevala A, Sangle A, Shah D, Tejani A, Sayyed A, Khutwad G, *et al.* Autologous platelet-rich plasma after third molar surgery. *Ann Maxillofac Surg* 2017;7:245-9.


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Table 2: The comparison of dehiscence at day 7 between two study groups

Dehiscence	Number of patients (%)		P
	Control group (n=25)	Test group (n=25)	
Present	11 (44.0)	1 (4.0)	0.001 (significant)
Absent	14 (56.0)	24 (96.0)	

Values are n (%). P values are obtained by Chi-square test for independence if cell frequency is larger than 5, else Fisher's exact probability test is used. P<0.05 is considered to be statistically significant

Table 3: The comparison of PPD between two study groups

Parameter	Control group (n=25)	Test group (n=25)	P
PPD (2 months)	3.9±0.2	2.6±0.4	0.001 (significant)

Values are mean±SD. P values by independent sample t-test (between group significance of difference). P<0.05 is considered to be statistically significant. SD=Standard deviation; PPD=Periodontal probing depth

CONCLUSION

In our study, results showed clinically significant reduced facial swelling, good wound healing, reduction periodontal probe, and clinical insignificant for pain between both study groups. The limitation of this study was that 2-month postoperative follow-up is of short duration to comment on the efficacy of PRP in complete soft tissue healing process but adequate enough to evaluate the effects of PRP in initiating and enhancing both hard and soft tissue healing. Long-term follow-up is required along with histological study of the bone for assessment of the efficacy of PRP

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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Postsurgical Epidermal Inclusion Cyst in the Cheek Region

¹Amit U Bhandarwar, ²Shilpa Patel, ³Jigna Pathak, ⁴Niharika Swain, ⁵Adil Gandevivala

ABSTRACT

Epidermal inclusion cyst (EIC) is one of the common conditions usually associated with trauma. This cyst commonly presents on the scalp, face, neck, trunk, and extremities. Epidermal inclusion cyst is believed to originate through implantation of epidermal element by either surgical or accidental trauma into deeper mesenchymal tissue and its subsequent cystic transformation. The EICs are indolent in nature, slow to progress, and remain asymptomatic unless secondarily infected. The authors report a case of EIC that occurred in a 35-year-old female after surgery of squamous cell carcinoma.

Keywords: Epidermal inclusion cyst, Epidermoid cysts, Mesenchymal tissue.

How to cite this article: Bhandarwar AU, Patel S, Pathak J, Swain N, Gandevivala A. Postsurgical Epidermal Inclusion Cyst in the Cheek Region. *J Contemp Dent* 2017;7(3):178-180.

Source of support: Nil

Conflict of interest: None

INTRODUCTION

Epidermal inclusion cysts are rare, slowly growing, benign, and developmental or acquired cysts which are derived from abnormally situated ectodermal tissue.¹ The terminology and nomenclature of EIC is numerous, which includes epidermal cyst, epithelial cyst, keratin cyst, follicular infundibular cyst, seborrheic cyst, milia, and so on.² The mainly reported cases are from the sites of face, trunk, neck, extremities and the scalp, genitals, behind the ear, fingers, palm, and soles.³ About 7% of them are located in the maxillofacial region.

The EIC arises from traumatic implantation of epithelium or entrapment of epithelial remnants during embryonic fusion or by the surgical trauma.⁴ The EIC is described as a dermal cystic enclosure of keratinizing

squamous epithelium that is filled with keratin debris. The EIC usually presents as a firm, slow-growing, smooth, freely movable, painless mass or lump underneath the skin at the subcutaneous dermal level, with an intact skin surface but no apparent drainage point. It is indolent in nature, slow to progress, and remains asymptomatic, unless secondarily infected. It contains soft, cheesy-like skin secretions. The EICs are approximately twice as common in males than females, can occur at any age, but the third and fourth decade is the most common. Epidermoid cysts are the part of features of certain syndromes like Gardner syndrome, basal-cell nevus syndrome, pachyonychia congenita, which do not demonstrate cysts of the oral mucosa, but facial cysts may occur. They are treated by simple pericapsular excision.^{2,3}

In the present study, we report a case of EIC, at surgically operated site of oral squamous cell carcinoma in left cheek region, whose features were rather unusual, in that, it presented as a painless fixed swelling, yellowish black in color, associated with foul smell mimicking an infection.

CASE REPORT

A 35-year-old female patient presented with swelling over left cheek area of face since 2 months (Fig. 1). It had gradually increased to the present size measuring approximately 2 × 1 cm. The patient gave the history of surgery of oral squamous cell carcinoma 9 months back in the same area. The lesion was a diffuse swelling over the left cheek, yellowish black in color with irregular overlying surface. The swelling was tender and firm on

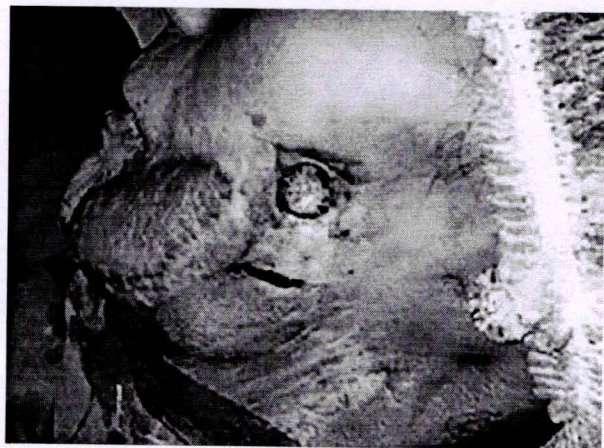


Fig. 1: 35-year-old patient with diffuse swelling over the left cheek area of the face

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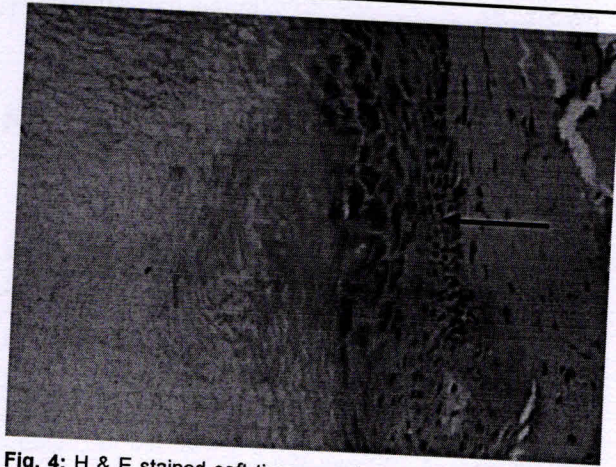


Fig. 4: H & E stained soft tissue section shows orthokeratinized stratified squamous epithelium, with a distinct Granular cell layer. The connective tissue capsule showed dense collagen with subepithelial layer of chronic inflammatory cells

range from 0.011 to 0.045%.⁶ In our case, surgical excision was done and a 7-month follow-up showed no recurrence.

CONCLUSION

The EIC arises from epidermal inclusion secondary to postoperative trauma, which results in implantation and

proliferation of squamous epithelium into the dermis. So care has to be taken to excise it *in toto*, along with the overlying skin and the punctum involved, in order to prevent recurrences from the residual keratin-producing lining of these cysts and to prevent possible malignant transformation.

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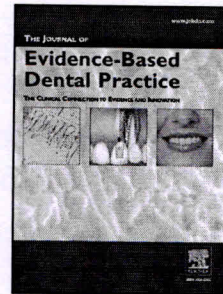
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Accepted Manuscript

Evaluation of the need for antibiotic prophylaxis after routine intra-alveolar dental extractions in healthy patients: A randomized double blind controlled trial

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PII: S1532-3382(17)30001-5
DOI: 10.1016/j.jebdp.2017.04.007
Reference: YMED 1197

To appear in: *The Journal of Evidence-Based Dental Practice*


Received Date: 12 January 2017

Revised Date: 20 April 2017

Accepted Date: 20 April 2017

Please cite this article as: Sidana S, Mistry Y, Gandevivala A, Motwani N, Evaluation of the need for antibiotic prophylaxis after routine intra-alveolar dental extractions in healthy patients: A randomized double blind controlled trial, *The Journal of Evidence-Based Dental Practice* (2017), doi: 10.1016/j.jebdp.2017.04.007.

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belief that many oral problems can lead to infection, stimulate the prescribing of antibiotics.

The issue of prophylactic antibiotic therapy in routine dental extractions is highly controversial. The current evidence questions the benefits of prophylactic antibiotic therapy which does not appear to provide any benefit to the patient. In our opinion there is no justification for routine antibiotic prophylaxis for dental extractions in healthy patients.



CASE REPORT

Modified Rhomboid Flap for Reconstruction of Defect of Cheek after Excision of Basal Cell Carcinoma

¹Adil Gandevala, ²Dinesh H Shah, ³Sunil Sidana, ⁴Akram Khan

ABSTRACT

The cheek is a very important part of the human face because it is the largest part and is essential in terms of both esthetics and functionality. Basal cell carcinomas (BCCs) are most common skin malignancy found in Caucasians and rarely in Asians. Treatment can range from topical medications, curettage, Mohs micrography, cryosurgery, laser surgery and excision. Defect left after excision can be cosmetically disfiguring. Options for reconstruction after excision of the lesion are skin graft and local flaps. We present a case of BCC of the cheek which was reconstructed with modified rhomboid flap.

Keywords: Cheek defect, Reconstruction, Rhomboid flap.

How to cite this article: Gandevala A, Shah DH, Sidana S, Khan A. Modified Rhomboid Flap for Reconstruction of Defect of Cheek after Excision of Basal Cell Carcinoma. J Contemp Dent 2016;6(2):154-156.

Source of support: Nil

Conflict of interest: None

INTRODUCTION

The cheek is a very important part of the human face because it is the largest part and is essential in terms of both esthetics and functionality. Cheek defects after excisions, basal cell carcinoma (BCC) can range from small to medium size which can be reconstructed by using a full thickness skin grafts or defects local flaps. Disadvantages with skin graft are second donor site required for skin graft and mismatch in color. Local flaps have the advantage of same-site donor tissue and good color match of skin from adjacent site of the lesion. However, donor-site morbidity and further scarring in an already cosmetically sensitive area may occur after most types of flap repair.¹

CHEEK ANATOMY

The cheeks constitute a substantial portion of the face and contain several important structures. A complete

knowledge of cheek anatomy is necessary before performing specific flap design, which allows safe and successful operative reconstruction procedure.

The facial artery is the main artery of face and originates from the external carotid artery and supplies predominantly the cheek region. A course of facial artery in face is tortuous, and it crosses the mandible at the facial notch then courses under the muscles of facial expression. Facial artery is oriented axially, giving rise to perforating vessels that supplies the subdermal plexus. An axial type of flap is based on a named vessel, such as the supra-orbital or superficial temporal arteries.² Random based local flaps get supply from the area of subdermal plexus.

An important fibrous network, called the superficial musculoaponeurotic system (SMAS), interlinks the muscles of facial expression. The SMAS lies under the subcutaneous fat, and its extension is continuous superiorly with the superficial temporal fascia (temporoparietal fascia) and inferiorly with the platysma.

Dissection of a cheek flap usually is performed in a layer of subcutaneous plane to preserve facial nerve and the subdermal vascular plexus. In some cases of larger defects, elevation below SMAS plane may be required for adequate vascularity of the flap.

CASE REPORT

A 65-year-old man presented for evaluation of a progressively enlarging plaque on the left lateral cheek. Physical examination revealed a sclerotic, yellow, depressed plaque of the upper left cheek measuring 1.8×1.3 cm (Fig. 1). Punch biopsy confirmed it to be a BCC. The lesion was excised with 6 mm margin. Primary closure of excised lesion would have led to ectropion of left lower eyelid (Fig. 2). Modified rhomboid flap was then designed adjacent to the defect. The flap was elevated in a subcutaneous plane and rotated into the defect. Skin closure was done with 5-0 ethilon (Fig. 3). Histopathology revealed nodular cystic variant of BCC. Three month after the surgery, healing was satisfactory with minimal linear scar (Fig. 4).

DISCUSSION

Face represents complete personality of a human being. Therefore, adequate cosmetic correction of facial defects arising due to various injuries and lesions is very important.

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requires prolonged daily wound care and frequent observation. This technique is not suitable as the healing wound distorts the surrounding structures. Skin grafting is also a commonly used method for reconstruction. A disadvantage of skin grafting is suboptimal color and texture matching between the grafts and surrounding tissue.

A local flap consists of a tongue-like protrusion of tissue which is made up of skin and a variable amount of the underlying subcutaneous tissue. Classification of flap is based on their vascular supply, composition, method of transfer, and design.³ In the face rectangular advancement flap by Burrow's triangle, bilobed flap, rhomboid flap, and forehead rotation flap are most commonly used in current practice.³

The rhomboid flap is a type of a complex transposition flap with a strict geometrical design introduced by Limberg in 1946. For a rhomboid design, the lesion is excised as rhomboid with internal angles of 60° and 120°. It also depends on location of the defect, the skin thickness of the donor site, and the orientation of the RSTL. In our case, as the defect was circular, modified rhomboid flap/rhombic flap was used in our case. In modified rhomboid flap, around a circular defect, two sides are drawn with apex forming 60°. The length of first side is

two-thirds the length of the diameter of the defect. The second side is equal in length to the first side. In our study, we used this modified rhomboid flap on cheek where creases are not prominent, skin is thinner, and resulting scar tends to blend better with adjacent skin.³

CONCLUSION

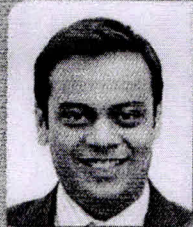
Reconstruction of facial defects by local flaps is easy and cost-effective technique, easy to learn, and takes minimum time to perform good esthetic results.

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9

SURGICAL CORRECTION OF ANKYLOGLOSSIA WITH FOUR-FLAP Z-FRENULOPLASTY



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A Case Report

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INTRODUCTION

Wollance defined tongue -tie as "a condition in which the tip of the tongue cannot be protruded beyond the lower incisor because of short lingual frenum.¹ The term Ankyloglossia originates from the Greek word "Agkilos" (curved) and "glossa" (tongue).² The ankyloglossia can be classified into four classes based on Kotlow's assessment as follows: Class I, mild ankyloglossia 12-16 mm; class II, moderate ankyloglossia 8-11 mm; class III, severe ankyloglossia 3-7 mm; and class IV, complete ankyloglossia <3 mm.³ Ankyloglossia can affect feeding, oral hygiene as well as some mechanical/social effects.

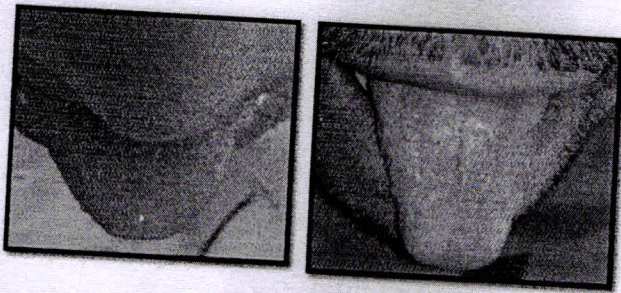
CASE REPORT

A 26 year old male reported to our department with a complain of difficulty in speech and protrusion of tongue since birth. He had undergone a surgical treatment for the same 1 year ago but since 2-3 months complains of difficulty in speech. On intraoral examination, it was found that the individual had some degree of ankyloglossia, there was no malocclusion and recession present lingual to mandibular incisors. Given the possibility of post treatment scarring and recurrence of the ankyloglossia following the first surgery surgical correction of the ankyloglossia, treatment was planned with four-flap Z-frenuloplasty, so as to minimize contracture from scar tissue and increase the length of the frenum. The patient was placed supine and a midline 2-0 silk suture was placed to retract the tongue, with the tongue tip elevated for maximum exposure and tension on the frenulum. The vertical midline was marked with a marker from the connections of the frenulum to the tongue, to the alveolus. The lateral lines were marked as 90 degrees at the superior and the inferior margins of the vertical line on alternate sides, with 45 degrees division to each of these angles. These flaps are 1-1.2 times the length of the frenulum. After anesthetizing the frenulum and the ventral surface of the tongue, the incisions were made along the lines through the mucosa and the flaps were developed bluntly. Any submucosal connective tissue within the frenulum was divided, and the flaps were rotated from an "ABCD"

Abstract

Frenum is a fold of tissue or muscle connecting the lips, cheek, or tongue to the jawbone. It is also known as frenulum, frenulums, frenula, frenums, or frena. Ankyloglossia, commonly known as tongue tie, is a congenital anomaly characterized by an abnormally short/tight lingual frenulum, which restricts mobility of the tongue tip. Though the ankyloglossia or tongue tie is not a serious manifestation, it may lead to a host of problems including infant feeding difficulties, speech disorders, and various mechanical and social issues related to the inability of the tongue to protrude. Lingual frenectomy is advised for the management of ankyloglossia. The present paper discusses one case of successful management of ankyloglossia or tongue tie with Four-Flap Z-Frenuloplasty technique

configuration to a "CADB" configuration and sutured into place with interrupted 4-0 Vicryl sutures. Post operatively patient showed improvement in speech, frenulum length and tongue protrusion gained.



DISCUSSION

Ankyloglossia is an uncommon congenital oral anomaly that can cause difficulty with breastfeeding, speech articulation.³ For many years, the subject of ankyloglossia has been controversial with practitioners of many specialties having widely different views regarding its significance and management. In many individuals, ankyloglossia is asymptomatic; the condition may resolve spontaneously or affected individuals may learn to compensate adequately for their decreased lingual mobility.

Surgical techniques for the therapy of tongue-ties can be classified into three procedures.⁴ Frenotomy is a simple cutting of the frenulum. Frenectomy is defined as complete excision, i.e., removal of the whole frenulum. Frenuloplasty involves various methods to release the tongue-tie and correct the anatomic situation. There is no sufficient evidence in the literature concerning surgical treatment options for ankyloglossia to favour any one of the three main techniques. Some individuals, however, benefit from surgical intervention: frenotomy, frenectomy or frenuloplasty for their tongue-tie. Patients should be educated about the possible long-term effects of tongue-tie so that they may make an informed choice regarding possible therapy.^{3,5}

CONCLUSION

Overall the Z-Frenuloplasty procedure is considered to be safe, cost effective and results in better functional and aesthetic appearance. This procedure allows for tissue healing by primary intentions; increasing recovery and reducing the risk of tissue contractures.⁶ Four-Flap Z-Frenuloplasty is an excellent technique specially in cases of post treatment scarring and recurrence of the ankyloglossia.⁷ However due to the limited evidence currently available on this procedure, further research is proposed in the field to compare the different surgical frenectomy procedures.

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Coronal Approach - A Simple And Cosmetic Approach To Craniofacial Fractures

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Dr. Sunil Sidana



Dr. Shah Dineshbhai Himmatlal



Dr. Adil Gandevala

Introduction

The ideal surgical approach to treat fractures of the craniofacial region should provide maximum necessary exposure of the fractured segments, minimize potential for further injury to facial structures and enable good cosmetic results¹. In treating craniofacial fractures various approaches and surgical incisions are used like Lynch (Sewal), Open sky, Gull wing (eye glass or spectacle), Butterfly, Lateral brow approach or existing laceration if present². The disadvantage of all these incisions is that they leave a visible scar. Increasingly, efforts are being made to access facial fractures through less visible areas. In this region, several options exist for access through cosmetically inconspicuous incisions. Coronal approach is one such approach and provides widespread exposure of the skull, and upper and lateral midfacial skeletons, with minimal morbidity (Fig. 1). These factors, coupled with the esthetic advantage of a scar hidden in the hairline, accounts for its continued popularity³. Coronal approach when combined with subciliary or transconjunctival approach and midfacial degloving approach can provide exposure of complete upper and midfacial skeleton.

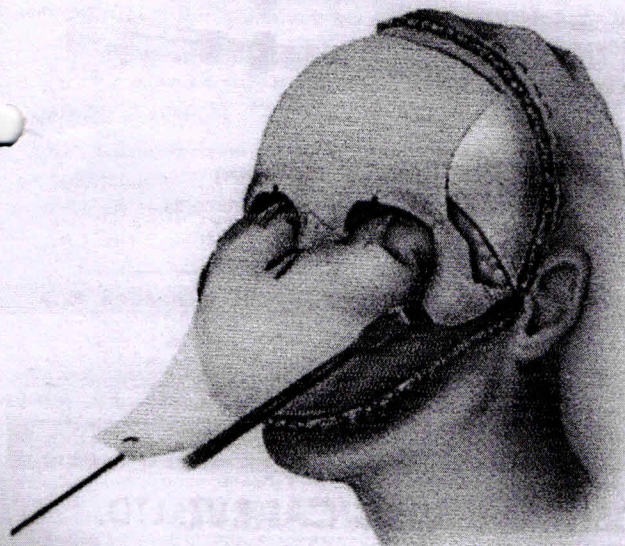


Fig. 1 Area exposed by coronal flap.

Surgical Anatomy

The layers of the scalp include from superficial to deep: skin, subcutaneous tissue, galea or frontalis muscle, subgaleal fascia and the periosteum. Although, over the temporalis muscle, the layers of soft tissue are more complicated. Above the temporal line of fusion, which is at the level of the superior orbital rim and delineates the superior aspect of the temporal fat pad, the layers include: skin, subcutaneous tissue, temporoparietal fascia (facial nerve and the superficial temporal artery run in this layer), deep temporal fascia, temporalis muscle, periosteum. Below the temporal line of fusion the layers include: skin, subcutaneous tissue, temporoparietal fascia, superficial layer of the deep temporal fascia, temporal fat pad (middle temporal artery runs in this pad), deep layer of the deep temporal fascia, temporalis muscle, periosteum (Fig 2). For males, the emphasis appropriately focuses on the status of the hairline. In some cases of mild male pattern baldness, the incision may be placed posteriorly to hide it in the remaining hair⁴.

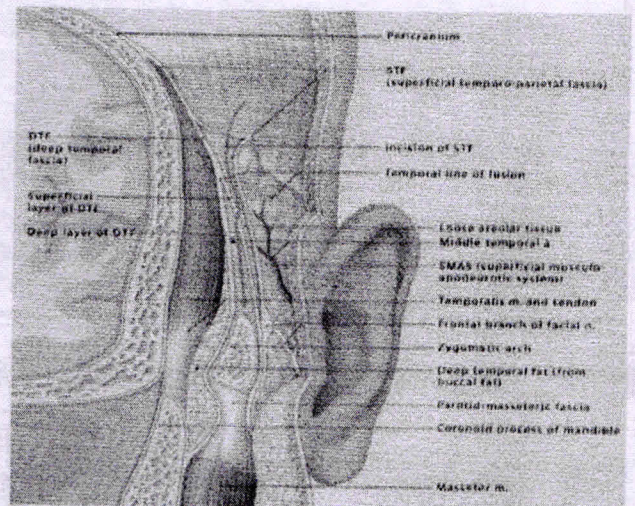


Fig. 2 Coronal Approach Planes of dissection to Zygomatic Complex.

Case Report 1

A 46 yr old patient presented with comminuted and severely displaced

was seen in two of our cases. In all three cases, scar was well hidden and almost invisible. No incidence of facial nerve injury was encountered.

Summary

The coronal approach is a versatile and cosmetically acceptable approach for access to the cranial vault, cranial base, forehead, nose, upper middle face and orbits. Relatively straightforward modifications of the surgical technique also allow the Surgeon to harvest vascularised pericranial flaps and cranial bone grafts for use in combined craniomaxillofacial and neurosurgical procedures.

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....contd. from page 30 - Clinical Steps In Full Mouth Rehabilitation - Part IV

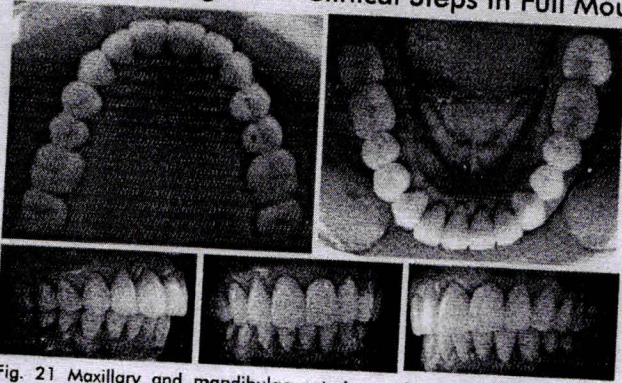


Fig. 21 Maxillary and mandibular anterior and posterior final ceramic restorations.

26] Night Guard

A protective soft polyvinyl splint is fabricated and given to the patient to prevent further damage to the restorations (Fig. 22).

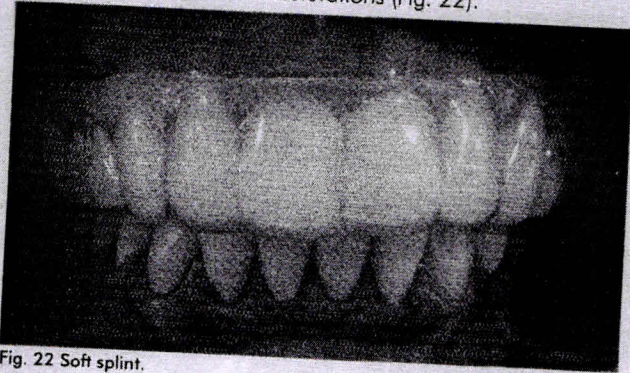


Fig. 22 Soft splint.

27] Follow Up

After 2 days of check up and occlusal corrections if any, the patient is called for regular follow up after 1 week, 1 month, 3 months and then after every 6 months. Comfort of the patient is assessed. Occlusion is evaluated. Gingival condition should be observed closely at every

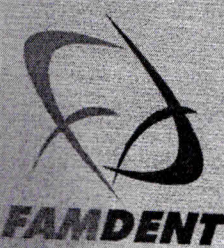
appointment for recession, inflammation, etc, if any condition is seen prompt measures should be undertaken. Patient is motivated to maintain proper hygiene and thus prolong life of restoration.

Conclusion

Full mouth rehabilitation always claims careful attention and meticulous treatment planning. It is a challenge to understand and address the chief concerns and desires of the patient, as well as to understand all the medical and dental implications related to treatment. A segmental approach to treatment planning, in a manner that allows the patient and practitioner to achieve goals over time, is very valuable. Not only can it help a patient achieve a desired outcome; but also this approach allows the doctor to know the care provided will be accepted and well tolerated by the patient.

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A rare case of complex odontome in posterior maxilla

Sushrut Vaidya, Sunil Sidana, Adil Gandevala, Ashvin Wagh

ABSTRACT

Odontomas are considered to be a developmental anomalies resulting from the growth of completely differentiated epithelial and mesenchymal cells that give rise to ameloblasts and odontoblasts. A rare case of complex odontome in posterior maxilla involving maxillary sinus, associated with impacted tooth and erupting into oral cavity is presented in this article which was treated with an en block resection and palatal obturator.

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KEY WORDS: Complex, erupted odontome, odontome

Introduction

Odontome is a benign odontogenic tumor showing nonaggressive behavior and slow growth.^[1] Clinically, it is classified as central (intra-osseous), peripheral (soft tissue or extra-osseous) and erupted odontome. Histologically, it is classified as compound odontome and complex odontome. According to World Health Organization 1992 classification complex odontome is a benign odontogenic tumor of mixed variety containing all types of dental tissues but in a disorderly pattern. It is thought that the complex odontome is a mature expression of ameloblastic fibro-odontoma.

Complex odontome occurs in second and third decade of life, female predilection (60%) and mostly occur in the mandibular first and second molar region. Incidence is less common than the compound odontome, not rare, but eruption through the oral mucosa is exceptional presentation. The treatment of choice is surgical excision of the lesion, confirmation of diagnosis by histo-pathological study and rehabilitation of the patient by appropriate means.

The objective of this article is to present a rare case of complex odontome in the posterior maxillary region involving maxillary

sinus and associated with an impacted tooth and erupting into the oral cavity.

Case Report

A 37-year-old female presented with a chief complaint of swelling in the upper left posterior maxilla with duration of 3 months. She gave a history of having her upper left first and second molars were removed 2 years ago. Extra-orally there was no gross facial asymmetry. On intra-oral examination, there was a nonhealing extraction socket with blackish hard mass in the upper left third molar region without any pus discharge. There was cortical expansion in the same region without any mucosal inflammation [Figure 1].

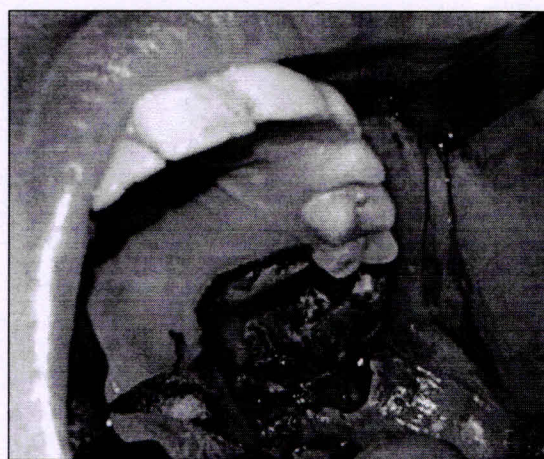


Figure 1: Pre-operative photograph

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DOI:

10.4103/2348-2915.161208

How to cite this article: Vaidya S, Sidana S, Gandevala A, Wagh A. A rare case of complex odontome in posterior maxilla. J Dent Res Rev 2015;2:82-5.

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Conclusion

A rare case of complex odontoma in the posterior maxilla associated with impacted tooth is presented which was treated with *en bloc* resection and palatal obturator.

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Source of Support: Nil, Conflict of Interest: None declared.

Surgical Removal of Fractured Endodontic Instrument in the Periapex of Mandibular First Molar

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Gandevivala A, Parekh B, Poplai G, Sayed A. Surgical removal of fractured endodontic instrument in the periapex of mandibular first molar. J Int Oral Health 2014;6(4):85-8.

Abstract:

The purpose of this article is to present the surgical removal of a broken endodontic file from the periapical region of the distal root of a mandibular first molar. The methods of diagnosis and measurement of the distance of the instrument to the adjacent vital structures in the periapical region was done with simple means and in an economical manner.

Key Words: Fractured endodontic instrument, mandibular first molar, periapical surgery

Introduction

Fracture of root canal instruments is one of the most troublesome incidents in endodontic therapy. Several studies focused on factors influencing defects of endodontic instruments after clinical use, and some recommendations were given to minimize the risk of instrument breakage.¹⁻³

It is reported that the prevalence of broken instruments ranges from 0.5% to 5%.⁴⁻⁷ If the broken file impedes adequate cleaning of the canal beyond the obstruction, prognosis might be adversely affected.⁸ Many a times, this lead to failure of root canal therapy and burdened the patients with anxiety.^{9,10} Strindberg found a statistically significant 19% higher failure frequency for cases in which there was instrument breakage compared with cases without breakage.¹¹ Therefore, the best option in the management of root canal instrument fracture is removal.¹² Several techniques and devices have been used for the removal of broken instruments.¹³⁻¹⁵ Difficult cases are occasionally encountered in which the separated file cannot be retrieved from the canal.⁸ Intentionally leaving a fragment in

the root canal might be considered when non-surgical removal has been attempted without success.¹⁶ In addition, vigorous reduction of the dentinal walls of the root canal space might cause perforation of the canal wall. This can adversely affect the prognosis of teeth.¹⁷

Endodontic instruments rarely separate beyond the apical foramen. The fractured segment, always accompanied with bacteria and dentine debris, is a foreign object and might cause inflammation.^{18,19} Moreover, patients often regard the fractured segment as "a broken needle" and suffer psychologically. Therefore, an attempt to remove the segment from such cases with a surgical approach is often necessary. Before surgery, the precise position and size of the fractured instrument should be understood as well as its relation to the root apex and surrounding anatomic structures.²⁰

The aim of the article is to present a case that used RVG to locate and successfully remove a fractured endodontic instrument partially beyond the apical foramen using a surgical approach.

Case Report

A 32-year-old Indian female patient came to the Department of Conservative Dentistry and Endodontics at our institute with a complaint of pain in the lower left posterior region. On clinical and radio graphical examination, it was diagnosed as a case of irreversible pulpitis due to a deep carious lesion involving the pulp and it was indicated for root canal treatment. Medical history was unremarkable.

After access opening, cleaning and shaping was initiated. Rotary protapers (Dentsply Maillefer, Ballaigues, Switzerland) were used with a 64:1 reduction gear Rotary endodontic hand piece (NSK, Nakanishi, Japan).

In the process of cleaning and shaping, a 5 mm segment of F2 rotary protaper got fractured in the apical 1/3rd of the distal canal (Figure 1). A decision to remove the instrument non-surgically was undertaken with the consent of the patient.

In an attempt to remove the file using microsomics, the file got accidentally pushed into the canal such that 2/3rd of the file was beyond the periapex and 1/3rd inside the canal (Figure 2).

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Case Report

13

Combined treatment for a combined enlargement

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Access this article online

Website:
www.jisponline.com

DOI:
10.4103/0972-124X.138747

Quick Response Code:



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Submission: 22-05-2013
Accepted: 29-10-2013

Abstract:

Calcium channel blockers are widely used in medical practice for the management of hypertension and in the prophylaxis of angina. Gingival overgrowth is now a recognized unwanted effect associated with many of calcium channel blockers. This can have a significant effect on the quality of life as well as increasing the oral bacterial load by generating plaque retention sites. Amlodipine, a third generation calcium channel blockers has been shown to promote gingival overgrowth, although reported in very limited cases. The management of gingival overgrowth seems to be directed at controlling gingival inflammation through a good oral hygiene regimen. However, in severe cases, surgical excision is the most preferred method of treatment, followed by rigorous oral hygiene procedures. This case report describes the management of gingival overgrowth in a hypertensive patient taking amlodipine.

Key words:

Calcium channel blocker, drug-induced, gingival overgrowth, management

INTRODUCTION

Drug-induced gingival enlargement is a well-documented unwanted side-effect within the literature. It has been associated with the use of three different types of pharmaceutical agents, including phenytoin, cyclosporine and calcium channel blocking agents.

Amlodipine, a dihydropyridine derivative is a third generation of calcium channel blockers, which shown to have longer action and weaker side effect compared to the first generation like nifedipine (Ellis *et al.*, 1993).^[1] The prevalence of gingival overgrowth in patients taking amlodipine was reported to be 3.3%.^[2] which is lower than the rate in patients taking nifedipine, 47.8%.^[3] During the past few years, amlodipine has been used with increasing frequency and also has been reported to promote gingival overgrowth.^[4]

CASE REPORT

This was a case report of a 48-year-old female patient who was referred to the Department of Periodontology. The patient complained of extensive gingival swelling along with a foul odor, bleeding and fetid discharge from gums. She also complained of continuous mild pain and a feeling of heaviness in both upper and lower jaws. Medical history revealed that the patient was taking treatment for hypertension and was on Amlodipine 10 mg, once a day for the past 2 years. There was no history of intake of any other drugs. The patient gave a history

of progressive gingival enlargement since the commencement of amlodipine therapy.

On intra-oral examination, a generalized and firm overgrowth of the gingiva was found throughout the maxilla and mandible particularly at the buccal side. Marginal and interdental gingival enlargement was well-appreciated covering almost cervical one-third of maxillary and mandibular anterior teeth. Gingiva was red in color with erythematous area and lobulated surface. Margins of the gingiva were rolled out with the loss of normal gingival scalloping. Hypertrophied areas were painless. Poor oral hygiene status of the patient was assessed from the presence of local irritating factors contributing to the inflammatory component of the gingival enlargement, which was especially more pronounced in the maxillary and mandibular anterior region [Figure 1]. The probing of the gingival sulcus revealed a range of probing depth between 5 and 7 mm and elicited the bleeding [Figure 2]. On the basis of the patient's history and clinical features, a clinical diagnosis of amlodipine-induced gingival overgrowth compounded with plaque induced chronic periodontitis was made.

Radiographic examination

Full mouth intra-oral radiograph and orthopantomographic examination revealed a generalized moderate horizontal bone loss [Figures 3 and 4].

Case management

Patient was subjected to Phase I therapy including the planned sessions of scaling and root planning.

oral hygiene instruction and motivation, and drug substitution [Figure 5]. However, due to incomplete resolution of the enlargement internal bevel gingivectomy was carried out [Figure 6]. Patient was recalled every month until first 3 months and then at the end of 6 months. Upon examination at 6 months review, the periodontal pockets were generally reduced to 3 mm. Very mild gingivitis was observed at the labial surface of lower incisors. Regular oral hygiene reinforcement and scaling was carried out during the maintenance phase. At 6 months after completion of the surgery, disappearance of gingival overgrowth and satisfactory periodontal condition were confirmed [Figure 7].

SUMMARY AND CONCLUSIONS

The reported case is an example of slowly progressive periodontitis. This was superimposed by a combined type of gingival enlargement; basically a drug-induced one, complicated by inflammatory changes due to plaque accumulation.

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How to cite this article: Tejani A, Gandevala A, Bhanushali D, Gourkhede S. Combined treatment for a combined enlargement. *J Indian Soc Periodontol* 2014;18:516-9.

Source of Support: Nil, **Conflict of Interest:** None declared.

CASE REPORT

Management of dentigerous cyst with pathological fracture of the mandible

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How to Cite:

Gandevivala A, Dandagi S, Sangle A, Tambuwala A. Management of dentigerous cyst with pathological fracture of the mandible. *J Dent Orofac Res* 2014;10(1):29-32.

ABSTRACT

A case of a 50-year-old male patient diagnosed with a pathological fracture of the angle of the mandible secondary to an undiagnosed dentigerous cyst associated with a mandibular third molar reported to our department. The patient was treated with enucleation of the cyst followed by reduction of the fracture and reconstruction with bone harvested from the anterior iliac crest. We have 1½ years follow without any signs of recurrence or major complications.

Key Words: Bone grafting, dentigerous cyst, iliac crest, pathological fracture.

Introduction

Dentigerous cyst (DC) is the second most common cyst of the jaw comprising 14-20% of all the jaw cysts.¹ The present data showed that most DCs (77%) were located in the mandibular third molar region. Typical DC presents clinically as an asymptomatic unilocular radiolucency enclosing the crown of an unerupted or impacted tooth; the radiolucency usually arises from the cemento-enamel junction of the tooth.² In most cases, the cyst keeps expanding and is not diagnosed until symptoms such as bony expansion, facial disfigurement, and tooth migration present. In our case, the DC was diagnosed due to patients complain of the fractured mandible.

The exact definition of a pathological fracture is controversial. One suggestion is a fracture that "results from normal function or minimal trauma in a bone weakened by pathology."³ Other authors have contended that it is impossible to define inadequate or minimal trauma, and that the definition should be "a fracture which occurs through a preexisting lesion or in a diseased part of the bone"⁴ and their incidence is <2% of all fractures.⁵

In oral and maxillofacial surgery, the anterior iliac crest is the

most frequently used donor site for autogenous bone grafts that are used in reconstructive procedures such as sinus floor elevation, augmentation procedures, closure of alveolar clefts, and in post-traumatic or post-ablative reconstructive surgery. This site provides abundant corticocancellous bone and allows a two-team approach.^{6,7} In our case, bone harvested from the anterior iliac crest was used to reconstruct the bony defect after enucleation of the cyst and help in healing at the fracture site.

Case Report

A 50-year-old male patient reported to the Department of Oral and Maxillofacial Surgery with a chief complaint of pain and swelling in the lower back right region since 3 days (Figures 1-3). The patient was asymptomatic 3 days ago until he received trauma by blow to the right side of the face. Following which he developed a small swelling in the same region, which increased in size gradually. Examination revealed a diffuse swelling associated with the right angle of the mandible measuring approximately 2.5 by 3.5 cm in size. A step could be palpated at the inferior border of the mandible. The swelling extended

Received: 9 January '14 Accepted: 17 March '14 Conflict of Interest: None

Pathological fracture of the mandible ... Gandevivala A et al

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CASE REPORT

Radicular Cyst - A Case Report of a Comprehensive Management

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Abstract:

A 26 year old female patient reported with a chief complaint of a painful swelling on the palate since 3 months with a history of trauma 3 years ago. On intraoral examination a soft fluctuant swelling on the labial and palatal aspects related to the upper right central and lateral incisors was observed. Radiographic investigation revealed a large unilocular radiolucency originating from the lateral incisor involving the adjacent incisor root. A clinical provisional diagnosis of a lateral periodontal or radicular cyst in relation to the lateral incisor was made.

Endodontic therapy was planned for the maxillary right central and lateral incisors. The lesion was completely enucleated, excising its complete lining in a single piece. Root resection of 3 mm from the apex was done for these teeth. MTA was placed.

The excised tissue was sent for histopathological examination. The histopathological examination were suggestive of "Infected Dental Cyst".

INTRODUCTION

Cysts can be broadly divided into developmental and inflammatory types based on their aetiology. The developmental cysts include the primordial cyst, the dentigerous cyst, eruption and gingival cysts. On the other hand inflammatory odontogenic cysts include the radicular cysts and the lateral periodontal cysts.¹ Radicular cysts are inflammatory jaw cysts at the apices of teeth with infected and necrotic pulps.²⁻⁵ These cysts comprise about 52 to 68 % of all the cysts affecting the human jaw.² It has been shown in recent studies that the radicular cysts comprise between 42 and 44 % of all apical lesions.⁶ Their incidence is highest amongst patients in their third decade of life and male prediction is higher than women. Anatomically the apical cysts occur in all tooth-bearing sites of the jaw but are more frequent in maxillary than mandibular teeth.^{2,3}

The presence of viable bacteria in the root canals is an

apparent prerequisite for the development of periradicular lesions.⁷ To eliminate such infection, conventional root canal treatment is the treatment of choice.⁸ When this treatment has failed or is not possible, surgical treatment is often the next option.⁹ One of the main goals of surgical endodontic treatment is to prevent the invasion of bacteria and their by-products from the root canal system into the periradicular tissues of teeth with apical periodontitis.^{10, 11} Surgical endodontic treatment might be indicated when nonsurgical retreatment is impractical or unlikely to improve the previous results,¹² or when a biopsy is needed.¹³

CASE REPORT

A 26 year old female patient reported with a chief complaint of a painful swelling on the palate since 3 months with a history of trauma 3 years ago. On intraoral examination a soft fluctuant swelling on the labial and palatal aspects related to the upper right

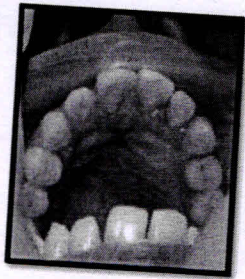


FIG 1: PRE OP PHOTO



FIG 2: PRE OP IOPA



FIG 3: PRE OP OCCLUSAL VIEW

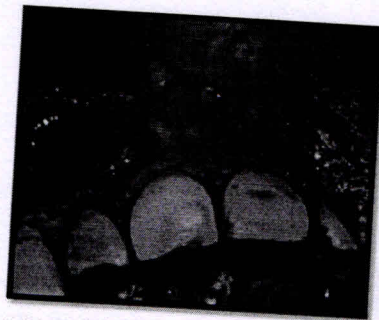


FIG 4: CYST PERFORATING LABIAL CORTEX



FIG 5: CYST PERFORATING PALATAL CORTEX

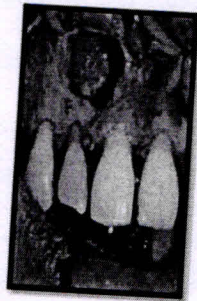


FIG 6: CAVITY AFTER ENUCLEATION



FIG 7: ENUCLEATED CYST



FIG 8: INVOLVEMENT OF BOTH CORTICES



FIG 9: IOPA AFTER RCT

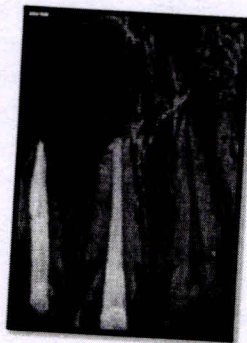


FIG 10: IOPA AFTER ROOT END RESECTION AND MTA FILLING

CASE REPORT

Premaxillary Alveolar Recontouring- A Case Report of Secondary Alveoplasty

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INTRODUCTION:

The goal of preprosthetic and reconstructive surgery in the twenty-first century is to establish a functional biologic platform for supportive or retentive mechanisms that will maintain or support prosthetic rehabilitation without contributing to further bone or tissue loss. This environment will allow for a prosthesis that restores function, is stable and retentive, preserves the associated structures, and satisfies esthetics.¹ After the natural dentition is lost, the patient can have an alveolar ridge with irregularities, undercuts, scarring, and insertion of perioral muscles that interfere with the stability of the prosthesis.² Often hard and soft tissues of the oral region need to undergo recontouring to provide a healthy and stable environment for future prosthetic restorations. Excessive bony protuberances and resulting undercut areas are more common in the maxilla than the mandible.³ Preprosthetic surgery is sometimes summarily dismissed by the prosthodontist as a part of his treatment plan because he is committed to a philosophy of bone conservation, but certainly bone can be removed in some regions without in any way reducing the total support or jeopardizing the stability of the denture.⁴

Alveoplasty is contouring of the alveolar ridge to remove any irregularities and undercuts to achieve ideal denture bearing surface. It can be performed by a range of instruments including bone file, bone rongeur, rotary instruments, chisel and mallet and lately the piezoelectric surgical unit has gained popularity.

Types:⁵

1. Simple alveoplasty- Compression of the lateral wall of the socket after extraction.
2. Interseptal alveoplasty- The interseptal bone is removed followed by repositioning of the labial cortical bone.
3. Conservative alveoplasty is carried out after multiple teeth extraction or later (not after that time) if the bony irregularities persist
4. Secondary alveoplasty: This is done to repair defects that remain after surgical extraction or following irregular bone resorption resulting in severe undercut or bony irregularities.

CASE PRESENTATION:

A 55 year old edentulous female patient was referred to the Department of Oral & Maxillofacial Surgery for correction of deep labial undercuts in the anterior maxillary region. She was a known diabetic and on medication (Oral Hypoglycemic Agents) for the same since the last 5 years. On examination the premaxilla seemed proclined bilaterally with deep undercuts, there were no signs of abnormal muscle attachments or presence of any root pieces (fig 1). The size of the undercut was not favorable towards satisfactory impressions or fabrication of dentures and was therefore advised alveoplasty or alveolar recontouring.



FIGURE 6: IMMEDIATE POST OP



FIGURE 7: 14 DAYS POST OP CAST

bony irregularities and undercuts were large the wedge of tissue between the two crestal incisions was excised to prevent excess flabby tissue postoperatively and to compensate for the substantial amount of bone removal necessary for this case. The use of a rongeur or file for advanced recontouring is preferred to rotary instruments to prevent over-reduction.⁷ However for large bony defects, rotary instrument recontouring is preferred. Normal saline irrigation is used to keep bony temperatures < 47°C to maintain bone viability.⁸

CONCLUSIONS:

1. Preprosthetic surgery is still a relevant treatment option for elderly patients.
2. Well-defined prosthodontic needs of ridge improvement may be satisfied in a simple and cost-effective manner with the aid of preprosthetic surgery.
3. Interdisciplinary cooperation is a prerequisite for optimal service.⁹
4. Preplanning with aids like mock surgery should be incorporated in as many cases as possible.

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Retrieval of Foreign Object from Maxillary Antrum — A Case Report

Smita Sonavane*, Usha Asnani, Adil Gandevivala

Abstract

The purpose of this paper is to discuss management protocol to retrieve a foreign body from the antrum. Impression material which was displaced in the maxillary sinus was removed through Caldwell-Luc surgery.

Key Words : Maxillary antrum, Foreign body, Oro-antral fistula, Caldwell-luc.

INTRODUCTION

The etiology of foreign bodies in the maxillary sinus can be classified as either traumatic like pieces of glass, stone, airgun pellets etc or iatrogenic like whole tooth, root of the teeth, cement, gutta-percha point, impression material or even an implant.¹

Removal of teeth where there is a close communication between the maxillary antrum and the oral cavity can lead to the root being dislodged into the antrum and an oro-antral communication.²

The purpose of this paper is to discuss treatment modality to remove foreign body from the maxillary antrum.

CASE REPORT

A 48 year old male patient was referred to the Dept. of Oral and Maxillofacial Surgery by his dentist with complaints of heaviness and dull pain over his right side of the face and dull ache in the right posterior maxillary teeth since 1 month. Patient gave H/O extraction of maxillary right 1st molar at a private dental clinic six months back. Since then he had H/O nasal regurgitation and pain in the area. Soon after that impression was made for a prosthesis in a private dental clinic.

Clinical Examination revealed an oro-antral fistula in relation to upper 1st molar. PA waters and CT scan (PNS) were advised. CT scan revealed obliteration of right maxillary sinus with considerable mucosal thickening (Fig. 1).

All relevant standard preoperative workup was done and Caldwell-Luc surgery was planned with an intention to close the oro-antral fistula under general anesthesia.

Incision used was trapezoidal type with a releasing incision mesial to 1st Premolar and distal to 2nd molar

with crevicular arm joining them. Full thickness mucoperiosteal flap was reflected using periosteal elevator to expose the canine fossa and the anterior wall of the antrum. Center of the canine fossa was perforated to enter the maxillary sinus using slow speed surgical hand-piece and the round bur under copious saline irrigation. The osteotomy cut was widened with Rongeurs forcep sufficiently to examine the antral cavity clinically (Fig. 2). On exploration green coloured mass was revealed lying in the antrum which was removed carefully using curved mosquito forcep (Fig. 3). The foreign object was found to be rubber base impression material (Fig. 4). The antral cavity was irrigated thoroughly with betadine-saline solution and examined carefully. The thickened hyperplastic antral membrane was removed followed by antral lavege.

Further a circular incision was given around the fistulous opening in first molar region on the alveolar ridge using No.11 blade. The fistulous tract was carefully dissected and excised. Antral lavege was done using antiseptic solution. Horizontal scoring was done on the periosteal surface of the flap using No. 15 blade, so that the buccal flap could be advanced to close the oro-antral fistula without tension. Intranasal antrostomy was performed by introducing a nasal rasp through the lateral wall of the nose below the inferior turbinate bone. It enters the sinus when force is applied. Curved artery forceps was passed through this opening and iodoform impregnated ribbon gauze pack end was grasped into its beak and was pulled out into the nostril. The other end was then packed systematically into the sinus cavity in multiple folds. The incision was then closed using interrupted 3-0 silk.

Following postoperative instructions given to the patient.-

- Extraoral application of ice pack.
- Not to blow the nose or sneeze
- Not to rinse the mouth vigorously.
- Patient was prescribed antibiotics and anti-inflammatory medicines for 5 days and otrivin nasal

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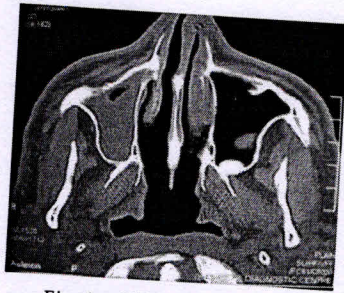


Fig. 1 : Obliteration of right maxillary sinus.



Fig. 2 : Access cavity made in the canine fossa to enter the maxillary antrum.

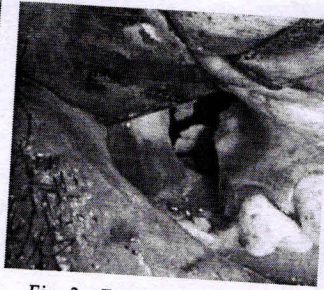


Fig. 3 : Foreign body located in the antrum.

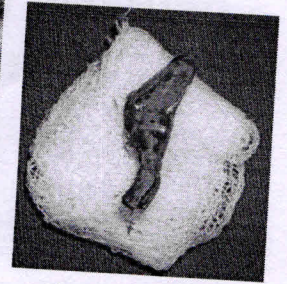


Fig. 4 : Foreign object found to be rubber base impression material.

drops 6 hrly.

The antral pack was removed on 5th day by holding the free end of the gauze drain from the nostril and slowly pulled out and was removed. The sutures were removed on the 10th day. Tincture benzoin steam inhalation along with nasal drops were continued for one more week.

DISCUSSION

Dental practitioners who extract maxillary posterior teeth will inevitably come across oro-antral communication and must be able to diagnose and properly treat this condition.

Oro-antral fistula is epithelial lined pathological communication between oral and antral cavity.

Oro-antral communication may be the result of:

1. Displacement of tooth/root into the sinus during extraction
2. Presence of periapical infection that has eroded the bony wall of sinus floor.
3. Extensive fracture of the maxillary tuberosity
4. Pathology associated with maxilla like cyst, tumor etc.

Various diagnostic aids to confirm the oro-antral communication are⁶

- Passage of air or bubbling of blood from the post extraction socket.
- Nasal regurgitation.
- Escape of air through nostril resulting in nasal twang
- Foul test in the mouth.
- Episodic sinusitis.
- Antral polyp herniates intraorally.

OPG, PA waters and lateral skull views are useful imaging tools in diagnosing a foreign body in the maxillary antrum.⁴ CT scan can be used to better ascertain the exact position of the foreign body and extent of sinus pathology.

In 1889, Heath was probably the first to describe access to the maxillary sinus through the canine fossa by trephination which in turn was refined by Caldwell in the United States and Luc in France in 1892. They

published their reports independently and popularized a new technique universally known as the Caldwell-Luc procedure.⁵

Indication for Caldwell-Luc procedure-

1. Removal of tooth fragment, tooth or any foreign body and antrolith.
2. To treat chronic maxillary sinusitis.
3. To excise cyst or benign growth from the maxillary antrum.
4. To treat fractures involving floor of the orbit or anterior maxillary sinus wall.³

The main advantage offered by this technique is the easy and rapid access to the maxillary sinus for examination and technical manipulation.⁵

Rare complications can include facial neuralgic pain and numbness.⁵

CONCLUSION

Foreign bodies in the paranasal sinuses must be removed surgically, even when they are asymptomatic. Reported sequelae include chronic sinusitis, cutaneous fistula, rhinolith formation and chronic pain.

In our case sinusitis was associated with foreign body and oro-antral fistula conventional Caldwell-Luc surgery along with oro-antral fistula closure with buccal advancement flap was preferred and intranasal antrostomy was performed as an adjunct procedure to facilitate drainage of the sinus.

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CASE REPORT

Management of Multiple teeth Avulsion

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Article Info

Received: April 13, 2010

Review Completed: May 18, 2010

Accepted: June 15, 2010

Available Online: July, 2010

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ABSTRACT:

Clinical practice has shown that most avulsed teeth are replanted after an extra-alveolar time that compromises the prognosis of replantation. In cases of delayed replantation, the use of adequate medium for storage and transportation of the avulsed teeth may improve this prognosis considerably. Difficulties inherent to accidental dental avulsion include the lack of immediate access to ideal storage media, delayed replantation of teeth and lack of knowledge of professionals first to see the patients. The authors report a case of accidentally avulsed permanent maxillary central incisors, permanent maxillary lateral incisors and permanent mandibular canine. Six months of follow-up revealed absence of root resorption, ankylosis or abnormal mobility.

Key words: Traumatic avulsion, avulsed tooth

INTRODUCTION

Accurate diagnosis and adequate treatment plan may constitute very complex tasks, particularly in tooth avulsion, because several variables are involved. In addition to the technical knowledge and clinical experience directed toward the quality of treatment, patient education may favorably influence the survival of replanted teeth.¹

The most preferable management for the avulsed tooth is replantation within 20-30min after injury or transporting it in an appropriate storage medium until the patient can be seen by a dentist for replantation.² These requirements for a favorable outcome are fairly well understood by pediatric dentists and the oral surgeons. The urgency of the emergency visit and the multidisciplinary nature of follow-up evaluations require both the lay public and practitioners from different dental disciplines to possess a knowledge of the treatment strategies involved.³

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Case Report

A 22 year old male patient reported to the Casualty department of Oral & Maxillofacial Surgery at M.A. Rangoonwala College of Dental Sciences & Research Centre with a history of trauma to the face due to fall from a motorcycle approximately 15-20 minutes ago.

On clinical examination he presented with lacerations to upper and lower lips, five missing upper and lower anterior teeth (11, 12, 21, 22, 33). There was no history of unconsciousness, vomiting, bleed from ear or nose or injuries to other parts. The recovered avulsed teeth (11, 12, 21, 22 and 33) were placed in isotonic saline with a dry time of only 10 minutes. On palpation a non displaced fracture of the dentoalveolar portion of the palatal bone was felt & upper canine teeth (13 and 23) were grade 1 mobile.

Surgical treatment

Sites of lacerations were cleaned and debrided, irrigated with saline and betadine solution. Lip lacerations were sutured with 3-0 vicryl and complete

endodontic treatment, adequate splinting of teeth and regular follow-ups we expect good long term results. The patient has to undergo yearly follow-ups up to a period of at least 5 years.

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Figure 1: Pre Operative

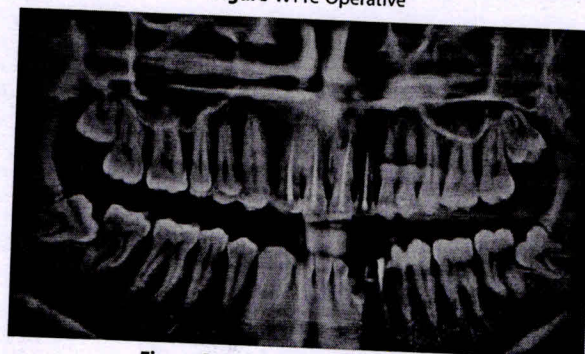


Figure 2: 24 hour Post operative OPG

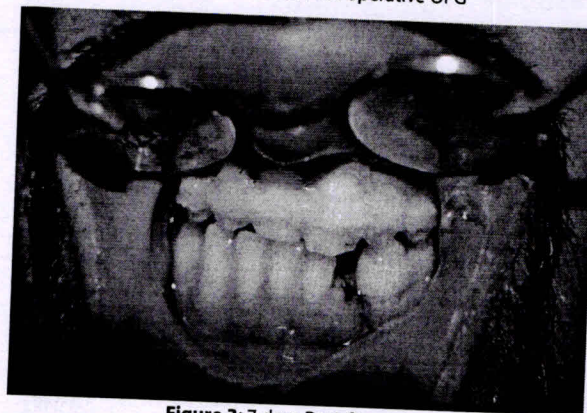


Figure 3: 7 days Post Operative



Figure 4: 6 months Post Operative



Original Article

Traumatic optic neuropathy in orbital wall fractures- diagnostic parameters and treatment outcomes: A prospective observational study

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Received 2 March 2021, Accepted 21 June 2021, Available online 23 June 2021, Version of Record 31 March 2022.

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Abstract

Introduction

The aim of the study was to evaluate the associated patterns of orbital wall fractures, diagnostic parameters of Traumatic optic neuropathy and its progress with Mega dose steroid therapy.

Materials and Methods

25 patients with unilateral orbital wall fractures of traumatic aetiology were evaluated with ophthalmologic and radiographic parameters. All patients were prescribed Mega Dose

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
Intravenous steroids irrespective of the timing of presentation. Ophthalmic assessment was repeated for same parameters every alternate day upto 2 weeks.


Results

Lateral orbital wall was found to be most commonly involved. Visual acuity, Pupillary Reactivity, Visual Field and Visual Evoked Potential showed statistically significant improvement post steroid therapy in early as well as late presenters.

Discussion

Highest incidence of Traumatic optic neuropathy was noted in multiple linear orbital wall fractures with highest incidence with lateral orbital wall involvement. Literature regarding Choice and timing of initiation of steroids based on timing of presentation is inadequate to justify skipping steroids to observe or undertake surgical intervention. In the present study marked improvement was noted post steroid therapy regardless of timing of presentation. The authors conclude that Visual evoked potential should be objectively tested and Mega dose steroid therapy should be initiated for all patients with Traumatic optic neuropathy for maximum benefit to the patient.

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Keywords

Traumatic optic neuropathy; Visual acuity; Visual field orbital wall fractures; Mega dose steroid therapy; Visual evoked potential

Abbreviations

CT, Computed Tomography; EOM, Extra-ocular motility; FxMxRxLx, F= Orbital Floor, M= Medial Wall, L= Lateral wall, R= Orbital Roof; IV, Intravenous; RTA, Road traffic accidents; OWFs, Orbital Wall Fractures; OV, Orbital Volume; ORIF, Open Reduction Internal Fixation; PR, Pupillary Reactivity; TRON, Traumatic Optic Neuropathy; VA, Visual acuity; VF, Visual Field; VEP, Visual Evoked Potential

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