

Case Report

報告者: Intern I 組
陳冠霖 陳穎萱 姜孔浩

指導醫師: 陳玉昆主任 林立民教授

General data

- Name : 0 0 0
- Sex : Male
- Age : 53 y/o
- Native : 屏東
- Marital status : 已婚
- Attending V.S.: 0 0 0醫師
- First visit : 103/2/18

Chief Complaint

- Malodor over right upper posterior teeth area



103/8/30

Present Illness

102/1

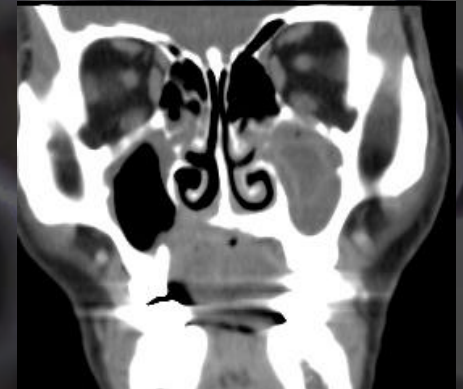
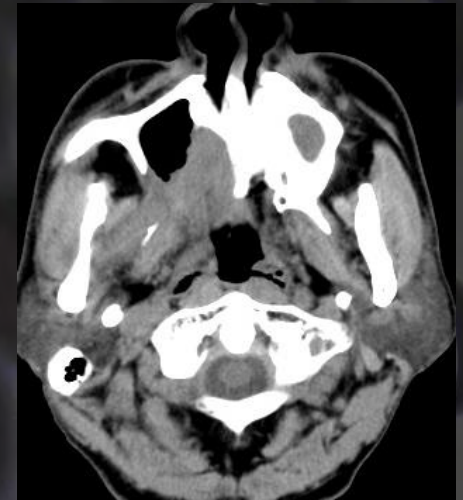
18 ext. in LDC -> OAC to 成大H surgery
-> secondary surgery (p't reject)

103/02/18

OAC for 1 year, arrange CT

103/3/4

CT : Partial resection of the right Mx. Alveolar process and the R't aspect of the hard palate



Past History

➤ Past Medical History

- Systemic disease: (-)
- Hospitalization (+)
- Surgery under GA: (+)
- Drug and food allergy : (-)

➤ Past Dental History

- General routine dental treatment

➤ Attitude to dental treatment: cooperative

Personal History

- Risk factors related to malignancy
 - Alcohol (+) 2 bot/day, 20y, permit
 - Betel quid (-)
 - Cigarette (+) 1.5 pack/day, 20y, permit
- Special oral habits: denied
- Irritation: denied

OMF Examination

- MMO=50 mm
- 16 17 mobility
- Blowing test (+)



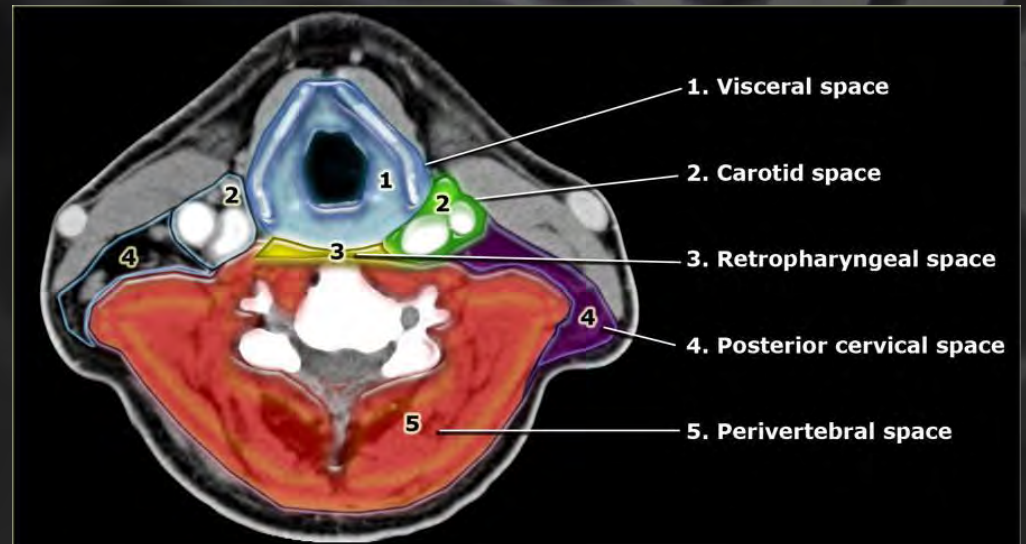
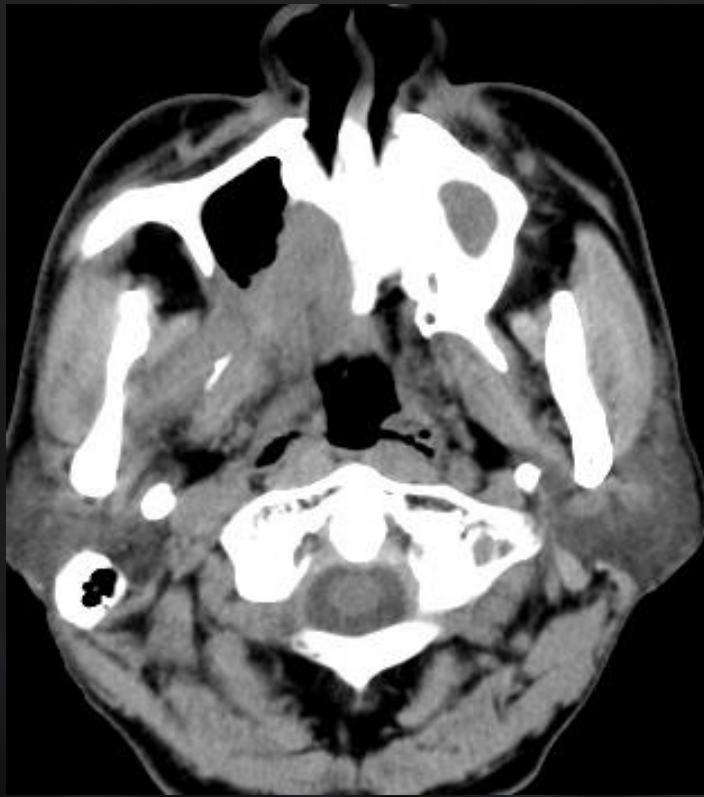
103/8/30

Image Finding – Pano 103/02/18



Image Finding – CT 103/3/4

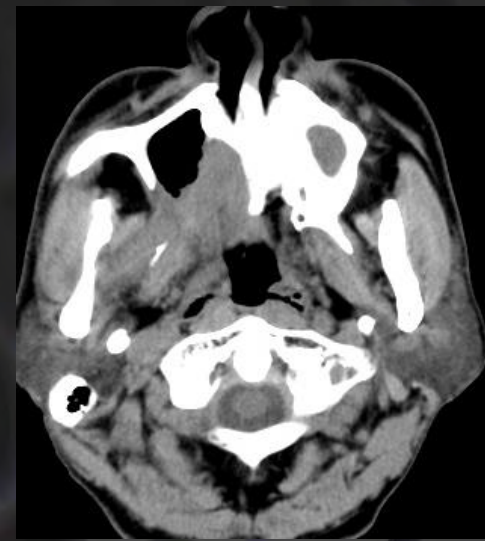
- Impression :
- 1) Partial resection of the right maxillary alveolar process and the right aspect of the hard palate.
- 2) Right frontal, bilateral ethmoid and maxillary sinusitis.
- 3) Enlarged lymph nodes in the bilateral jugulo-digastric spaces. Suspect reactive lymphadenopathy.
- 4) Non-specific small lymph nodes (<1cm) in the submental, the right submandibular, the bilateral jugulo-digastric, and the posterior cervical spaces.



DIFFERENTIAL DIAGNOSIS

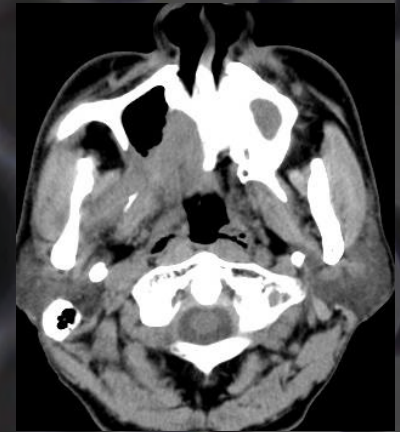
Image finding

- Well – defined
- Cloudy image
- Partial resection of the right maxilla alveolar process and the right aspect of the hard palate



Differential diagnosis

- Oralantral communication (or fistula), right maxilla
- Sinusitis, right maxillary sinus
- Radicular cyst, tooth 17



Working diagnosis

	Our case	OAC
sex	Male	No predilection
Age	53	Older (over 40)
Site	Upper right posterior	1st and 2nd upper molar teeth extraction
S/S	Bite pain	Usually not painful unless secondary sinusitis develops
X-ray features (of risk factor)	Cloudy image	<ul style="list-style-type: none"> - Large sinus - Large and unfavourable shaped roots extending into the sinus - Hypercementosis
Clinical features	Non healing socket	Non healing socket

Working diagnosis

	Our case	(Maxillary) sinusitis
sex	Male	No predilection
Age	53	No predilection
Site	Upper right posterior	All of the sinus
S/S	Bite pain	Acute: fever, pain over temporal, cheek periorbital, toothache
size	fixed	
X-ray features	Cloudy image	Chronic: cloudy, increased density due to antrolith
Clinical features	Non healing socket	Chronic: swelling

Working diagnosis

	Our case	Radicular cyst
sex	Male	No predilection
Age	53	No predilection
Site	Upper right posterior	Entire quadrant perapical
S/S	Bite pain	Typically no symptoms unless there is an acute inflammatory exacerbation
size	fixed	Gradually enlarged
X-ray features	Cloudy image	Radioculency
Clinical features	Non healing socket	- Swelling - Adjacent teeth mobility

Impression

- Oral antral communication, R't Mx
- Sinusitis, right maxillary sinus



Treatment Course

103/3/19

➤ ENT OP : bilateral multiple sinusectomy



103/2/18

Post ENT surgery – Pano 103/6/3



Treatment Course

- OS OP: Ext. 16 17 + local flap



Pre-operation survey

➤ Chest PA View (103/8/23)

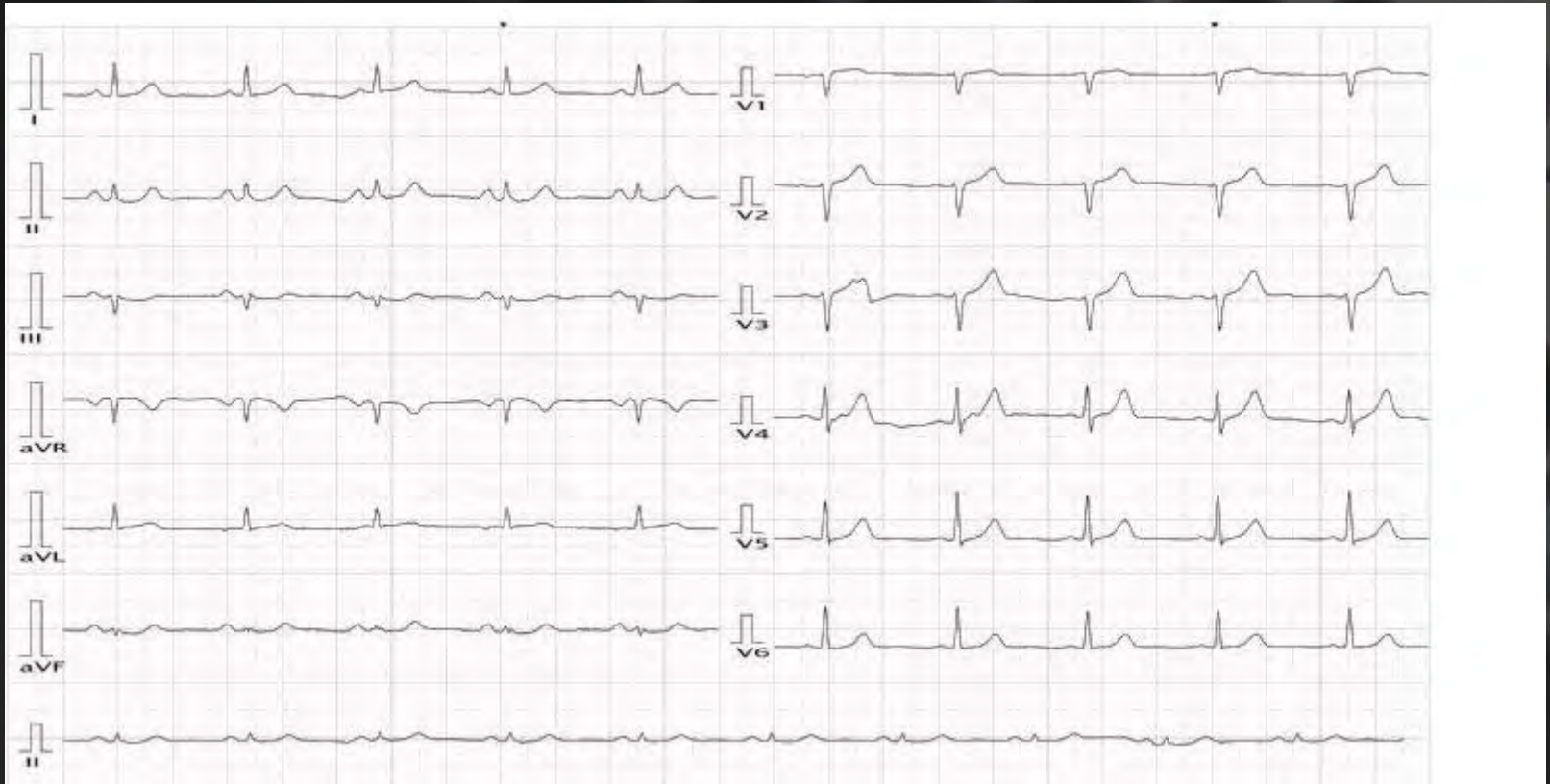
Impression

- 1) Fibrocalcified lesions at right upper lung
- 2) Right apical pleural thickening
- 3) Atherosclerosis of tortuous aorta
- 4) Scoliosis & spondylosis of thoracolumbar spine



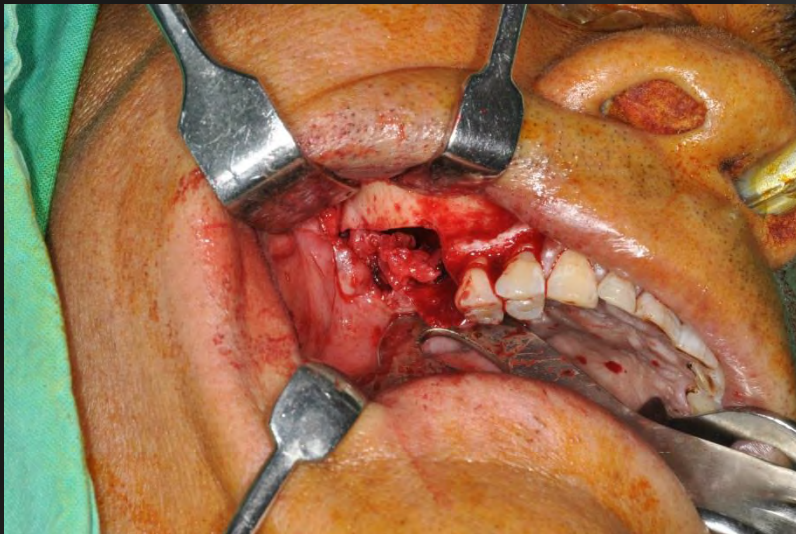
Pre-operation survey

- EKG Diagnosis: (103/8/25)
- Normal Tracing

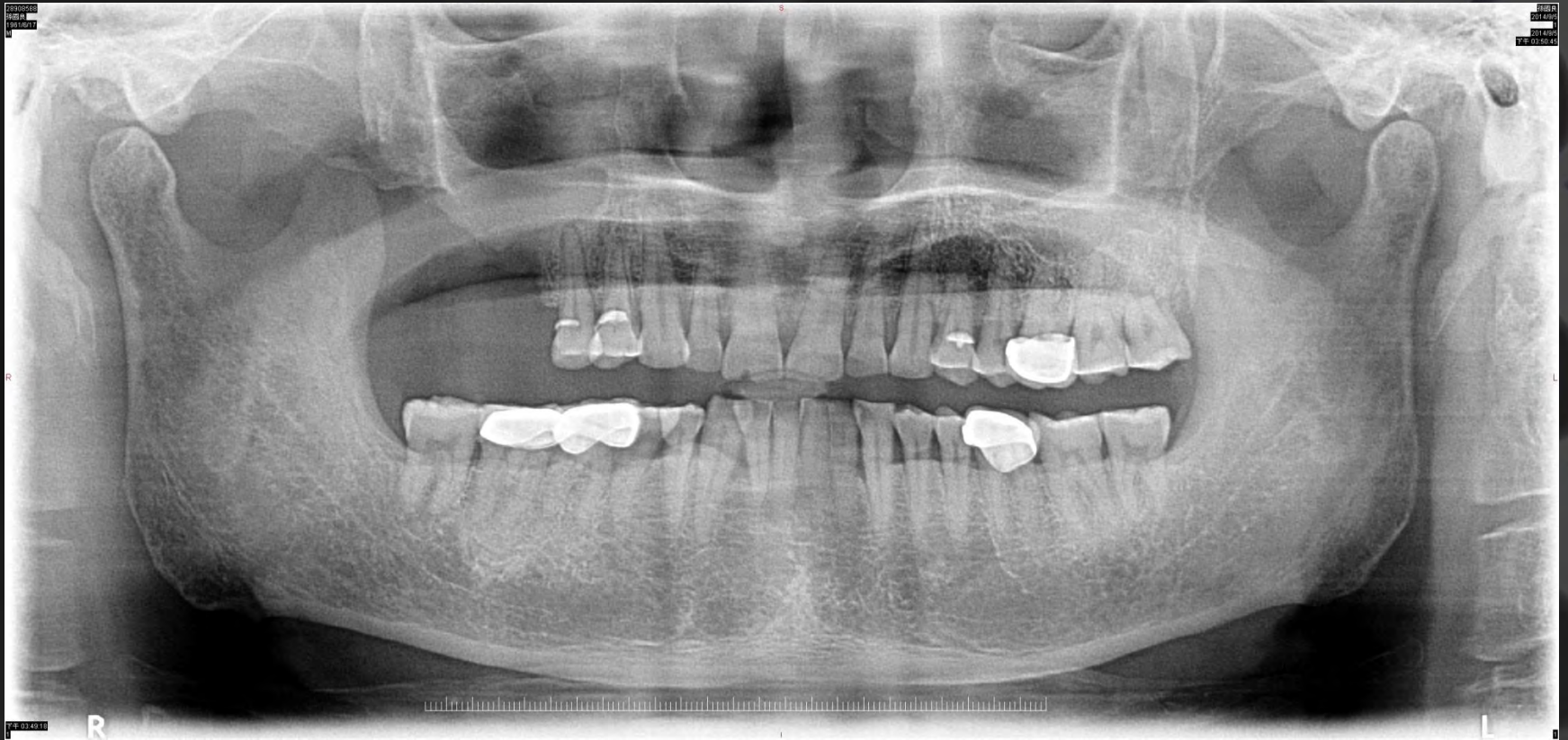


OS Operation 103/9/4

➤ 103/9/4 OS OP: Ext. 16 17 + local flap



Post OS surgery – Pano 103/9/5



H-P report

➤ Pathologic diagnosis:

Bone, maxilla, right, excision, fibrous hyperplasia
and chronic inflammation

Bone, maxilla, right, excision, vital bone
fragment



Reliability of Two Surgical Methods for Oroantral Communication Closure; A Clinical Study of 20 Patients

Abdulkadir Burak Cankaya*, Mehmet Ali Erdem, Sirmahan Cakarer, Sabri Cemil Isler, Sabit Demircan and Cuneyt Korhan Oral

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DISCUSSION

Introduction

Oroantral Communication (OAC):

- uncommon complication in oral surgery
- maxillary first molar
- the second molar
- third molar
- bicuspid

Introduction

- defects of <5 mm: close spontaneously
- larger communications: surgical closure
(better within 24 to 48 hours)

Introduction

Cause of OAC:

- anatomic proximity of the root apices to the sinus floor
- dentoalveolar infections
- destruction of a portion of the sinus by cysts or benign or malignant tumors
- Paget's disease
- Trauma and dentoalveolar or implant surgery

Introduction

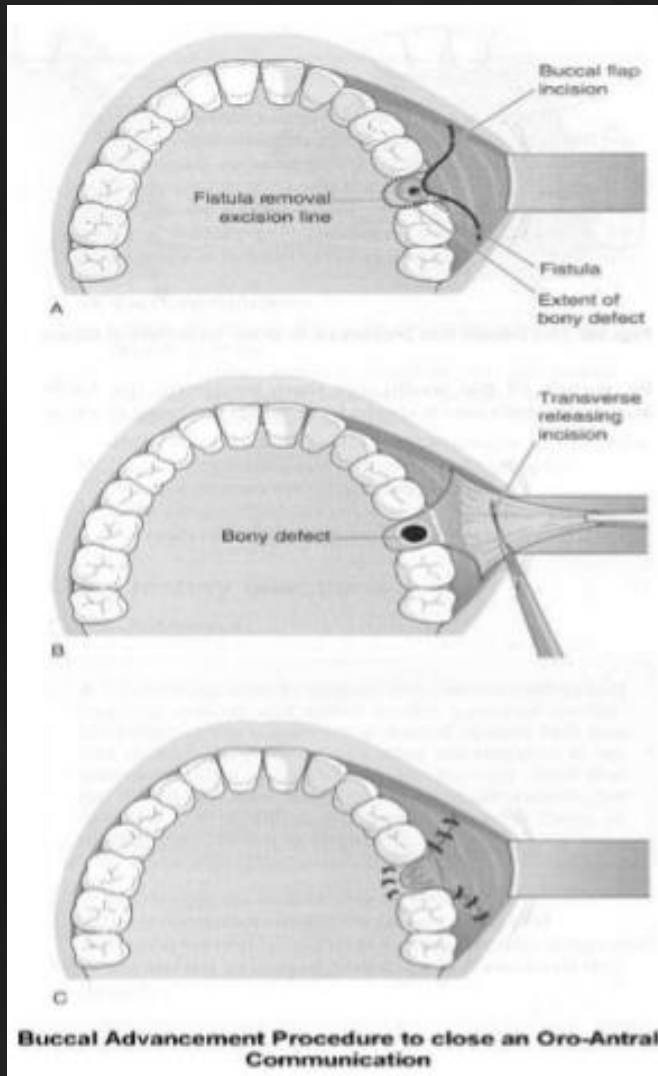
- methods of surgical OAC : depends on...
- amount and condition of the tissue available for repair
- the size and location of the defect
- our study: evaluated the reliability of two OAC closure techniques

Materials and Methods

- 20 OAC patients
- 10 : buccal advancement flaps(BAFs)
- 10 : palatal rotation–advancement flaps(PRAF)
- same surgeon
- 1 and 3 months post-OP

buccal advancement flaps

- broad-based trapezoid mucoperiosteal flap
- cleaning the fistula
- alveolar bone was smoothed
- flap was advanced and sutured to the palatinal tissue with silk suture



Buccal advancement flap-
Von rehrmann (1936); Berger
(1939)



Figure 1: Buccal Advancement Flap (BAF) procedure.

palatal rotation–advancement flap

- full-thickness mucoperiosteal flap
- anterior extension of the flap
- measuring the distance of the arc of flap rotation
- width of flap depends on bony defect and angle of rotation
- After op : surgical splint for 1 week

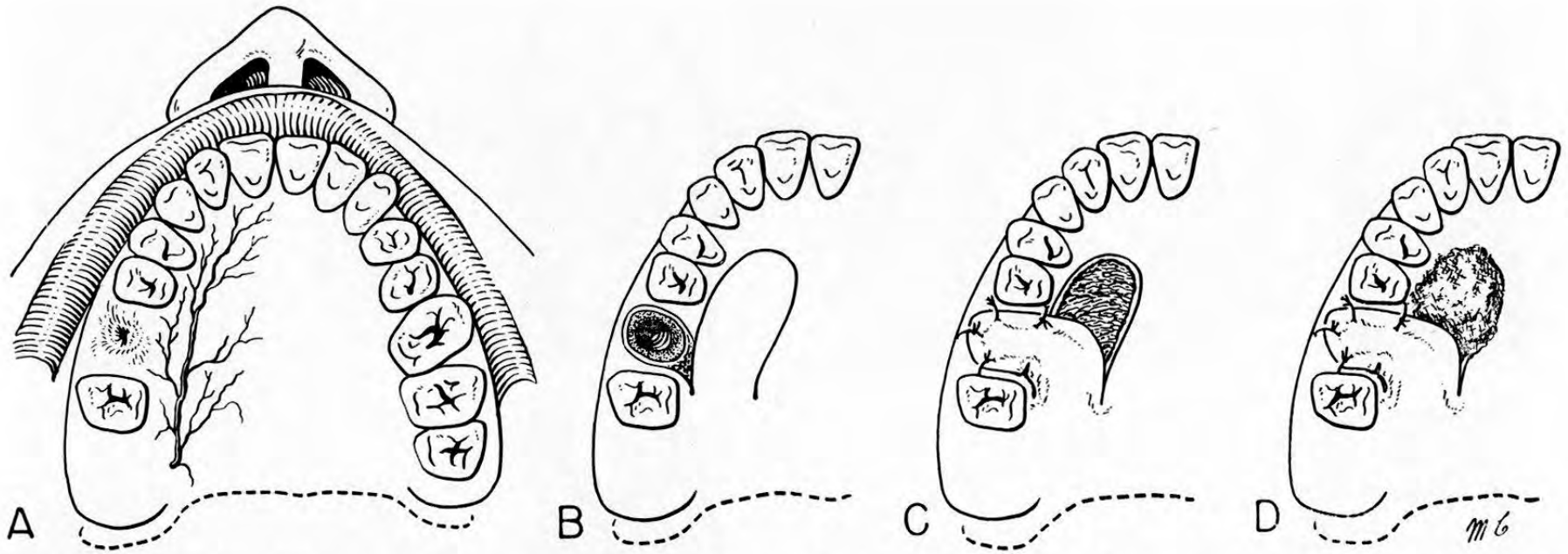


FIGURE 822. Closure of antro-oral fistula with teeth present by means of rotated palatal pedicle flap.

A, Diagram of palate with fistula and outlining course of anterior palatine artery.

B, Incision for palatal flap. Note the small wedge of tissue removed on the distolingual side of the fistula to allow for flap rotation. Fistulous opening is freshened.

C, Flap rotated and sutured into position. There is a troublesome bulge distally.

D, Palatal defect filled with surgical cement pack to permit painless healing.

Note: A palatal incision is made so that the palatine artery will be inside the pedicle flap, thus assuring a good blood supply from the base of the flap. We are not satisfied with our results using this technique, although others are.



Figure 2: Preoperative view of fistula 4 months after tooth extraction.



Figure 3: Full-thickness mucoperiosteal flap designed based on the greater palatine vessels.

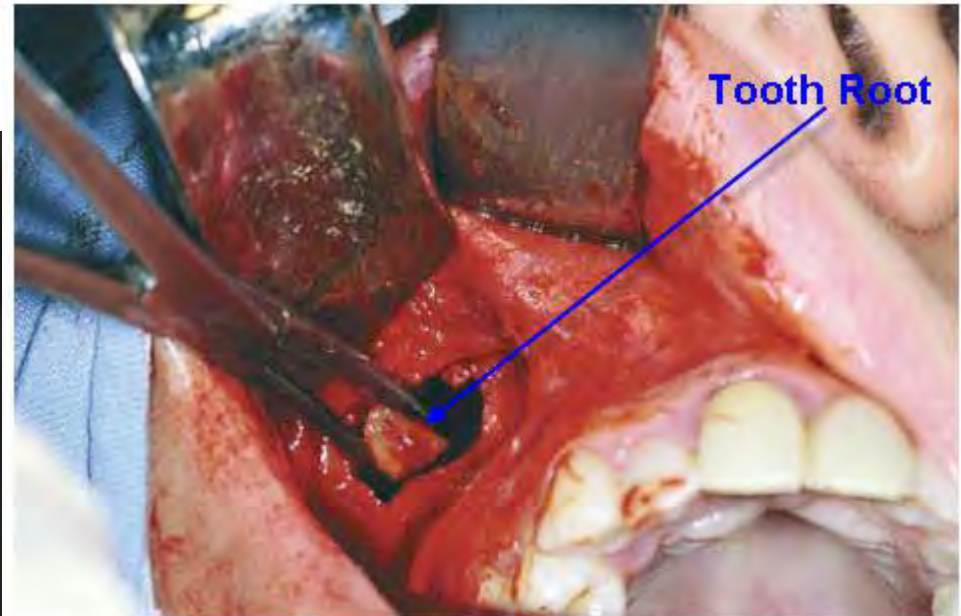
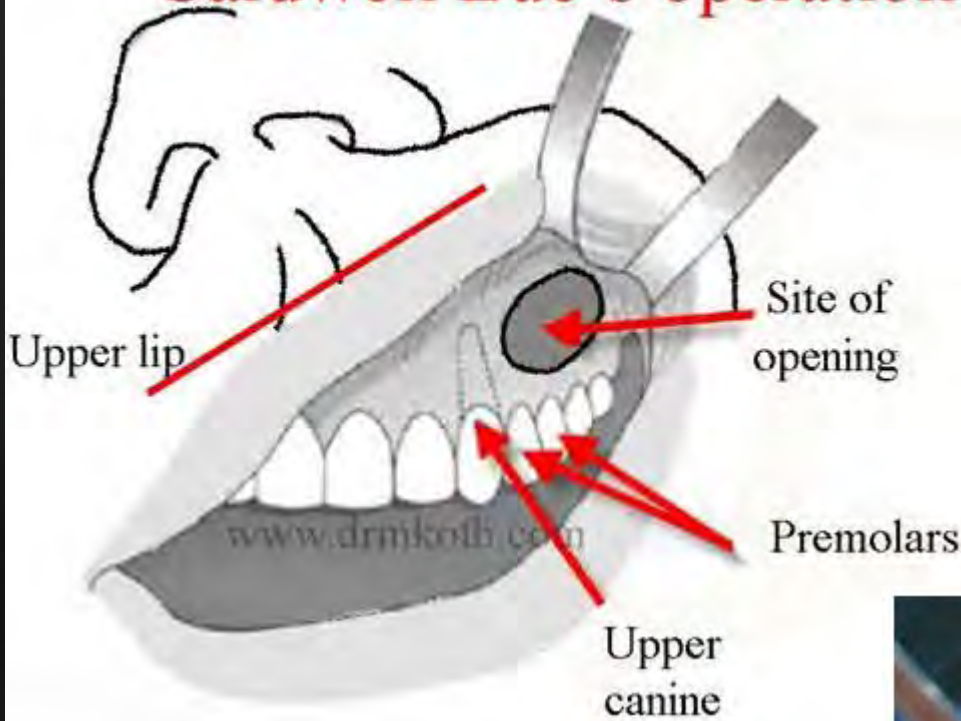


Figure 4: The alveolar bone was smoothed, and the PRAF was rotated, advanced, and sutured to the buccal tissue.

Results

- 19/20 healed uneventfully
- donor site of the palatal flap completely healed 3 months post-op
- grafts were not necessary
- no flap necrosis except 1 undergone Caldwell–Luc procedure and the palatal island flap technique

Caldwell Luc's operation



Removal of a root from the maxillary sinus using the Caldwell-Luc surgical technique

- in this case, a second surgical intervention was performed
- autogenous cartilage graft was harvested from the ear
- the graft was placed in the bone defect
- soft tissue closure was obtained with a palatal advancement flap

Technique	Patient	Gender	Age (y)	Fistula region	Etiology	Size (mm)	Complications
BAF	1	M	54	Right first molar	Tooth extraction	<5	No
BAF	2	M	39	Left fist molar	Tooth extraction	<5	No
BAF	3	F	41	Right second molar	Tooth extraction	<5	No
BAF	4	M	20	Right third molar	Tooth extraction	<5	No
BAF	5	F	54	Left second molar	Tooth extraction	<5	No
BAF	6	M	32	Right first molar	Tooth extraction	<5	No
BAF	7	M	32	Right first molar	Tooth extraction	<5	No
BAF	8	M	28	Right first molar	Tooth extraction	<5	No
BAF	9	M	28	Left first molar	Tooth extraction	<5	No
BAF	10	M	42	Left second molar	Tooth extraction	<5	No
PRAF	11	M	43	Left second molar	Tooth extraction	>5	No
PRAF	12	M	73	Left first molar	Odontogenic cyst	>5	Yes
PRAF	13	M	46	Left first molar	Tooth extraction	>5	No
PRAF	14	M	65	Left second molar	Tooth extraction	>5	No
PRAF	15	M	54	Left second molar	Odontogenic cyst	>5	No
PRAF	16	M	47	Right second molar	Tooth extraction	>5	No
PRAF	17	M	71	Left second molar	Tooth extraction	>5	No
PRAF	18	M	56	Right second molar	Tooth extraction	>5	No
PRAF	19	M	44	Left second molar	Tooth extraction	>5	No
PRAF	20	M	54	Left first molar	Tooth extraction	>5	No

Table 1: Distribution of patient characteristics, defect region, size, etiology, and surgical techniques (BAF: Buccal Advancement Flap, PRAF: Palatal Rotation–Advancement Flap).

DISTRUBUTION OF ETIOLOGY

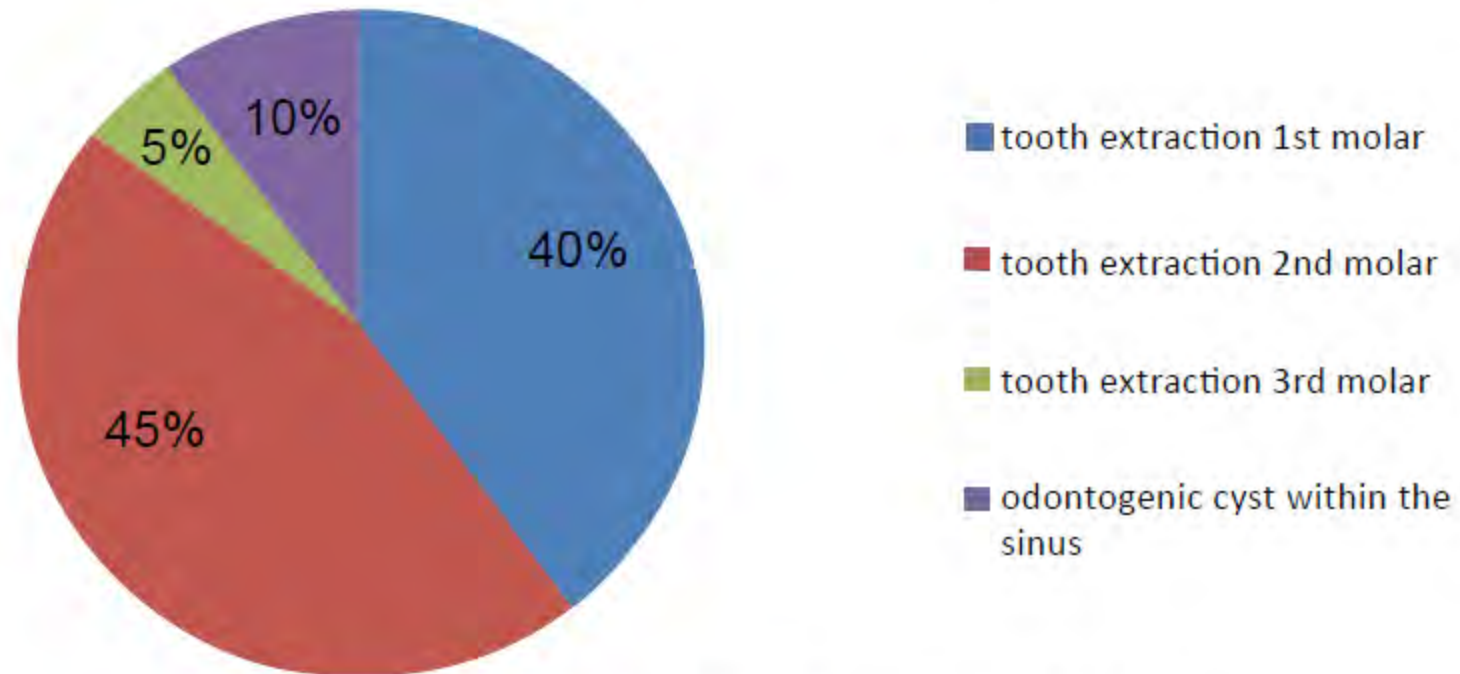


Figure 5: Distribution of etiologies of OAC.

Discussion

BAF:

- defect < 5 mm
- immediate OAC
- easy to perform
- shallow vestibular sulcus after op → interfere with prosthodontic rehabilitation

Discussion

PRAF :

- defect > 5 mm
- greater palatine artery : good blood supply
- length/width ratio is important

Conclusion

- OAC if not diagnosed and managed improperly → oroantral fistula and maxillary sinusitis
- choice of closure procedure : depends on...
 1. amount and condition of the tissue available for repair
 2. the size and location of the defect

醫學倫理討論

醫學倫理

- 生命的神聖性(Sanctity of life)
- 六大原則

Tom Beauchamp & James Childress

六大原則 - 1979

1. **行善原則(Beneficence)**：醫師要盡其所能延長病人之生命且減輕病人之痛苦。
2. **誠信原則(Veracity)**:醫師對其病人有「以誠信相對待」的義務。
3. **自主原則(Autonomy)**:病患對其己身之診療決定的自主權必須得到醫師的尊重。
4. **不傷害原則(Nonmaleficence)**:醫師要盡其所能避免病人承受不必要的身心傷害。
5. **保密原則(Confidentiality)**:醫師對病人的病情負有保密的責任。
6. **公義原則(Justice)**: 醫師在面對有限的醫療資源時，應以社會公平、正義的考量來協助合理分配此醫療資源給真正最需要它的人。

行善原則

- OAC 影響患者生命品質, 要盡量降低所可能發生之併發症

誠信原則

- 對於患者的疾病**嚴重程度**是否有確實地通知，盡到告知的義務？
- 是否有清楚的向病人說明清楚疾病病程、治療計畫、預後、風險？
 - 皆以已告知病人後，經同意才進行手術。
- 清楚告知病人抽菸對於手術術後的影響

自主原則

- 充分說明病情、治療計畫、風險以及開刀和不開刀的利弊之後，是否有讓病人充分地選擇治療計畫？
 - 病人及家屬選擇並同意醫師的建議。
- 在做全身麻醉以前，是否有說明完整之後再請病人自主的簽名同意？
 - 已充分說明並與家屬溝通。
- 若有其他種治療選項也須讓患者知悉並自主選擇

不傷害原則

- 是否有先完整瞭解病人的病史？
 - 治療前有完整蒐集病史資料，並與病患溝通後擬定進一步的治療計畫
- 手術過程中，是否有造成不必要的醫源性的傷害？
 - 沒有不必要醫源性傷害。

保密原則

告知的對象

1. 本人為原則
2. 病人未明示反對時，亦得告知其配偶與親屬
3. 病人為未成年人時，亦須告知其法定代理人
4. 若病人意識不清或無決定能力, 應須告知其法定代理人、配偶、親屬或關係人
5. 病人得以書面敘明僅向特定之人告知或對特定對象不予告知

公義原則

- 手術的必要性？
- 手術的外部成本？
- 施行此手術時是否會排擠到其他更需要醫療資源之患者？

醫學倫理總結

- 在病歷撰寫方面（病兆描述、治療計畫、病人態度）應書寫詳盡，使治療過程有詳實的記錄
- 詳盡告知義務，使患者清楚知道自己目前的處境
- 在進行治療之前，須讓病人充分了解目前以及之後的療程內容，在自主同意之下簽署同意書
- 應在不違反醫學倫理的原則之下進行治療的行為

THANK YOU FOR YOUR ATTENTION!