

# Case Report

Intern H 組

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101/4/24

指導醫師: 陳玉昆主任暨口腔病理科全體醫師

# General Data

- Patient name: 江XX
- Chart number: 2XXXXX5
- Gender: Female
- Age: 30
- Native origin: 台灣
- Martial status: 未婚
- Attending doctor: 許瀚仁
- First visit: 101/4/6

# Chief Complaint

- Pain over right anterior region of the mandible for 3 days

# Present Illness

- This 30 y/o female patient suffered from pain and discomfort over her right mandible (tooth 43-45 region) for 3 days, and so came to our OPD seeking help.

# Intraoral Findings

- 2cmx2cm lesion buccal of tooth 43.44
- Dome shape
- Hard
- Normal mucosa color
- Fixed
- Pain (+)
- Tenderness (-)
- Suspect bone expansion



# Medical and Dental History

- Medical history:
  - Systematic: Denied
  - Hospitalization: Denied
  - Allergies: Denied
- Dental history:
  - General routine dental treatments

# Medical and Dental History

- Oral Risk Factors:
  - Alcohol consumption: Denied
  - Betel-quid chewing: Denied
  - Cigarette Smoking: Denied
- Oral habits: Denied any special oral habits
- Attitude toward dental treatments: cooperative

# Dental Examination

- Missing: Tooth 21, 45
- Crown and bridge: Tooth 11x 22 PFM bridge
- Caries: Tooth 11M, 14M, 35M
- Calculus: Tooth 11D, 12M, 14D, 34D, 44M



# Radiographic Examination



- There is a well-defined ovoid shaped unilocular radiolucent lesion mixed with radio-opacities located at lower right premolar area. The lesion extends from the root apex of tooth 41 to distal of root of tooth 44, and extends from middle third of roots of 43, 44 down to the lower border of mandible, measuring about 2 x 2.7 cm in diameter.

# Radiographic Examination

- Root resorption (-)
- Loss of lamina dura: Tooth 44
- Tooth displacement : Tooth 44



# Radiographic Examination

- There is a well-defined unilocular lesion mixed with radiolucency and radiopacity, measured 3cm x 2.5cm in maximal diameter extending from mesial of tooth 42 to mesial of tooth 46.
- Buccal and lingual bone expansion is present with thinning of cortical margins.



# Working Diagnoses

# Inflammation, cyst or neoplasm?

	Our case	Inflammation	Cyst	Neoplasm
Color	Pink to normal	Red	Normal	Variable
Fever	-	+	-	-
Consistency	hard	Rubbery	Soft	Variable
Discharge	-	+	-	+/-
Pain	+	+	-	+/-
Ulceration	-	-	-	+
Mobility	Fixed	Fixed	Fixed	Fixed
Duration	Unknown	Days	Years	Months
Bony destruction or expansion	+	-	+	+



Cyst or neoplasm

# Benign or malignant?

	Our case	Benign	Malignant
Surface	Smooth	Smooth	Rough
Ulceration	-	-	+
X-ray margin	Well-defined	Well-defined	Poor-defined
Mobility	Fixed	Movable	Fixed
LAP	-	-	+
Duration	Unknown	Years	Months

—————→ Benign

# Peripheral or intrabony?

	<b>Our case</b>	<b>Peripheral</b>	<b>Intrabony</b>
Consistency	<b>Firm to hard</b>	Rubbery	<b>Firm</b>
Ulceration	-	+/-	+
X-ray margin	<b>Well-defined</b>	Poor-defined	<b>Well-defined</b>
Induration	-	+	-
Mobility	<b>Fixed</b>	<b>Fixed</b>	<b>Fixed</b>
Bony destruction or expansion	+	-	+

—————> Intrabony

# Working diagnosis

## Intrabony benign tumor or cyst

### ● Benign Tumor

#### ■ Odontogenic

- Cemento-ossifying fibroma
- Ameloblastoma (Desmoplastic)
- Calcifying epithelial odontogenic tumor(CEOT), Pindborg tumor

#### ■ Non-odontogenic

- Osteoblastoma

### ● Cyst

- Calcifying odontogenic cyst (Gorlin Cyst)



# Working diagnosis

- The List (more possible → less)
  1. Cemento-ossifying fibroma
  2. Calcifying epithelial odontogenic tumor (CEOT), Pindborg tumor
  3. Osteoblastoma
  4. Ameloblastoma (Desmoplastic type)
  5. Calcifying odontogenic cyst (Gorlin Cyst)

# Cemento-ossifying fibroma

- Etiology
  - A benign neoplasm of odontogenic bone & cementum (fibro-osseous lesion)

# Cemento-ossifying fibroma

	Our Case	Cemento-ossifying fibroma
Gender	Female	Female
Age	30 y/o	20~40 y/o
Site	Right mandibular premolar and incisors region	Mandibular premolar or molar region
Symptom/Sign	Swelling and pain	Painless swelling
Effects	Bony destruction and expansion Teeth displacement	Bony destruction and expansion Roots of related teeth can be displaced

# Cemento-ossifying fibroma

Radiographic features	Our case	Cemento-ossifying fibroma
Density	RL+R/O	RL+RO
Border	Well-defined with corticated margin	Well-defined, with thin R/L rim surrounded by a narrow zone of cortication
Shape	Unilocular	Unilocular

# Calcifying epithelial odontogenic tumor (CEOT), Pindborg tumor

- Etiology
  - A tumor of odontogenic origin
  - Arises possibly from
    - Dental lamina remnants
    - Statum intermedium of enamel organ

# Calcifying epithelial odontogenic tumor (CEOT), Pindborg tumor

	Our case	CEOT
Gender	Female	Both
Age	30 y/o	30-50 y/o
Site	Right mandibular premolar and incisors region	Most on posterior mandible(57%)
Symptom/Sign	Swelling and pain	Slow-growing swelling Painless
Effect	Bony destruction and expansion Teeth displacement	Bony destruction and expansion

# Calcifying epithelial odontogenic tumor (CEOT), Pindborg tumor

Radiographic features	Our case	CEOT
Density	RO + RL	RO + RL
Border	Well-defined with corticated margin	Well-defined 20% corticated margin (20% Ill-defined) Scalloped
Shape	Unilocular	Unilocular Multilocular (honeycomb) Often with impacted 3 <sup>rd</sup> molar Driven snow appearance

# Osteoblastoma

- Etiology
  - A benign tumor arises from osteoblast



# Osteoblastoma

	Our case	Osteoblastoma
Gender	Female	Female $\geq$ Male
Age	31 y/o	< 30 y/o
Site	Right mandibular premolar and incisors region	Normal: Vertebral column Sacrum calvarium
		Jaw: posterior teeth area of jaw bone
Symptom/Sign	Swelling and pain	pain Not relieved by aspirin
Effect	Bony destruction and expansion Teeth displacement	Bony destruction

# Osteoblastoma

Radiographic Features	Our case	Osteoblastoma
Density	RL + RO	RL + RO
Border	Well-defined with corticated margin	Well-defined/ill-defined Corticated margin
Shape	unilocular	Unilocular or Multilocular

# Ameloblastoma

- Etiology
  - A tumor of odontogenic epithelium
- Ameloblastoma (Desmoplastic type)
  - Dense fibrous stroma
  - Radiographic features : R/L+R/O

# Ameloblastoma

	Our Case	Ameloblastoma (Desmoplastic type)
Gender	Female	Both
Age	30 y/o	20~70 y/o
Site	Right mandibular premolar and incisors region	Anterior maxilla
Symptom/Sign	Swelling and pain	Rare pain or paresthesia
Effects	Bony destruction and expansion Teeth displacement	Adjacent teeth displaced, loosened, often resorbed, extensive expansion in all directions

# Ameloblastoma

Radiographic features	Our case	Ameloblastoma (Desmoplastic type)
Density	RL+RO	RL+RO (Dense fibrous septa)
Border	Well-defined with corticated margin	Scalloped, well-defined, well-corticated
Shape	Unilocular	Multilocular (soap- bubble or honeycombed)

# Calcifying odontogenic cyst (Gorlin Cyst)

- Etiology
  - Uncommon lesion among odontogenic cysts
- Clinical behavior
  - Variable, some were regarded as neoplasms (infiltrative or malignant)
  - May be associated with AOT or ameloblastoma

# Calcifying odontogenic cyst (Gorlin Cyst)

	Our case	Calcifying odontogenic cyst (Gorlin Cyst)
Gender	Female	No predominant
Age	30 y/o	Diagnosed between 20-30y/o, average 33 y/o
Site	Left mandibular body	Most on Incisors and Canine areas(65%)
Symptom/Sign	Swelling and pain	Unspecific
Effect	Bony destruction and expansion	Bony destruction and expansion Teeth displacement and root resorption

# Calcifying odontogenic cyst (Gorlin Cyst)

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Radiographic Features	Our case	Calcifying odontogenic cyst (Gorlin Cyst)
Density	RL + RO	RL + RO
Border	Well-defined with corticated margin	Well-defined
Shape	Unilocular	Unilocular Occasionally Multilocular



# Clinical impression

- Cemento-ossifying fibroma over tooth 43, 44, 45 area

# Histological Pathologic Report

送檢時間：101/04/09 報告時間：101/04/11 送檢醫師：許瀚仁醫師

## Pathological diagnosis:

Bone, mandible, tooth 43&44 apical area, incision,  
cemento-ossifying fibroma

## Gross Examination :

The specimen submitted consists of more than 10 soft tissue fragments in 1 bottle, measuring up to 0.3 x 0.2 x 0.2 cm in size, fixed in formalin. Grossly, they are white in color and elastic in consistency.

## Microscopic Examination :

The slide contains two identical groups of irregular-shaped soft tissue specimens. Microscopically, it shows **cemento-ossifying fibroma**.

# Treatment Plan

# Treatment procedure

- First visit at OS(101/04/06)

Radiographic exam : PE, panoramic and occlusal film

Clinical exam

# Treatment procedure

First visit at OS (101/04/06)

Incisional biopsy under local anesthesia

Specimen sent for H-P report

Rx: Amoxicillin 500mg, 1# , QID x III days

Strocain , 1# , QID x III days

Panadol 500mg, 10# , sig. 1# , p.r.n.



# Treatment procedure

OS (101/04/13)

Appointment for H-P report

Wound condition: OK

Symptoms and signs stationary

H-P report : Cemento-ossifying fibroma

Suture removal

Arrange CT scan on 101/04/27

# Treatment Plan

Cemento-ossifying fibromas can usually be readily enucleated, separating from bone in the plane of their capsule.

Occasionally, large tumors that have distorted the jaw require local resection and bone grafting, but recurrence is rare.

# 醫學倫理討論

以Jonsen架構檢視這次病例  
的治療模式  
是否符合醫學倫理



# Tom Beauchamp & James Childress

## 六大原則- 1979

- 1. 行善原則(Beneficence)，亦即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)，亦即醫師對其病人有「以誠信相對待」的義務。
- 3. 自主原則(Autonomy)，亦即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)，亦即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)，亦即醫師對病人的病情負有保密的責任。
- 6. 公義原則(Justice)，亦即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。

# Jonsen架構

- Jonsen, Siegler and Winslade; *Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine* (3rd edition McGraw-Hill 1992 )
- 1. 醫療現況
- 2. 病人抉擇
- 3. 生命品質
- 4. 社會脈絡

# Medical indication for intervention

- 江小姐因切片診斷出其右下顎骨有 **Cemental-ossefying fibroma**, 因此要考慮治療的選擇。考慮接受腫瘤切除術與否, 需考慮若切除與否預後各是如何?
- 是否有其他替代治療以維護病人自主選擇的權益?

# Patient's Preference

- 江小姐並無心智失能且在法律上有能力，理應選擇對她最有利的治療方式，並需被告之治療可獲得的利益及其風險，且病歷記載中並無記錄病人於術前表示其喜好，並於之後排定治療流程中皆相當配合，於此方面應無違反醫療倫理。

# Quality of life

- 若施行腫瘤切除術合併移除因病灶而影響到的牙齒42, 43, 44，病人即使治療成功，病人需面對該處咬合重建的問題，醫療提供者是否將此考慮進去並告知病患，是否會影響病人對此病灶處理方式的態度？
- 在腫瘤邊緣的牙齒41, 42是否先以保留為目標？
- 若不治療，則病患是否能行使正常生活不受病灶影響？

# Contextual issues

- 江小姐目前未婚，無丈夫子女等家庭因素影響治療，但病歷上並未詳載病人使否有經濟、宗教、文化上之因素會影響病人選擇治療。其餘法律因素、社會資源應對此病例無影響，且無利益衝突者介入醫療過程。

# 醫學倫理總結

- 應多注意病歷記載，特別對於病灶之治療計畫及病人態度，以了解此案例在醫療現況及病人抉擇上是否合乎醫學倫理原則。
- 此病人需手術介入，並需長期配合及考慮家庭支持之因素，應更詳盡詢問病人社會脈絡部分。

# Reference

- Oral & Maxillofacial pathology 3rd ed.
- Cawson's essentials of oral pathology and oral medicine (8th ed.)  
© R.A. Cawson, E.W. Odell
- 台灣臨床倫理網絡  
<http://www.tcen.org.tw/index.asp>



Thank you for your attention!