

Case report

Intern I 組

許容齊 萬信佑 廖書珮 吳昇翰

指導醫師: 陳玉昆主任暨口腔病理診斷科全體醫師

General data

- Name: 陳XX
- Chart no.: 1xxxxxx4
- Gender: Female
- Age: 58 y/o
- Native origin: 屏東
- Martial status: 已婚
- Attending doctor: 吳崇維
- First visit: 101.04.11



Chief complaint

- A swelling over L't posterior mandible for 1 week

Present illness

- This 58 y/o female accepted periodontal tx at 署屏 Hospital for several months. Last week, the dentist found out that there is a swelling mass over L't posterior mandible, and suggested her to come to our OPD for further examination. On 101.04.11, she came to our OPD for examination and tx

Medical and dental history

Past Medical History

- Hospitalization: (-)
- Surgery under GA: (-)
- Hypertension(+)
 - Not under medical control
 - 140-150mmHg on 101.04.11
- Denied any food or drug allergies

Past Dental History

- General routine dental treatment

Attitude towards dental treatment: co-operative

Medical and dental history

- Risk factor related to malignancy
 - Alcohol : (-)
 - Betel quid: (-)
 - Cigarette: (-)
- Special oral habits : Denied
- Bite irritation : Denied

Dental examination

- Missing: Tooth 16, 18, 26, 27, 28, 36, 37, 46
- Crown and bridge: 15x17, 25, 34, 35xx38, 45x47
- Caries: Nil
- Calculus: Generalized deposition

Intraoral findings

- Size: 0.7 x 0.5 cm
- Color: pink
- Surface: smooth
- Base: sessile
- Shape: dome
- Consistency: rubbery
- Fluctuation: (-)
- Mobility: fixed
- Pain: (-)
- Tenderness: (-)
- Paresthesia: (-, lip tongue)

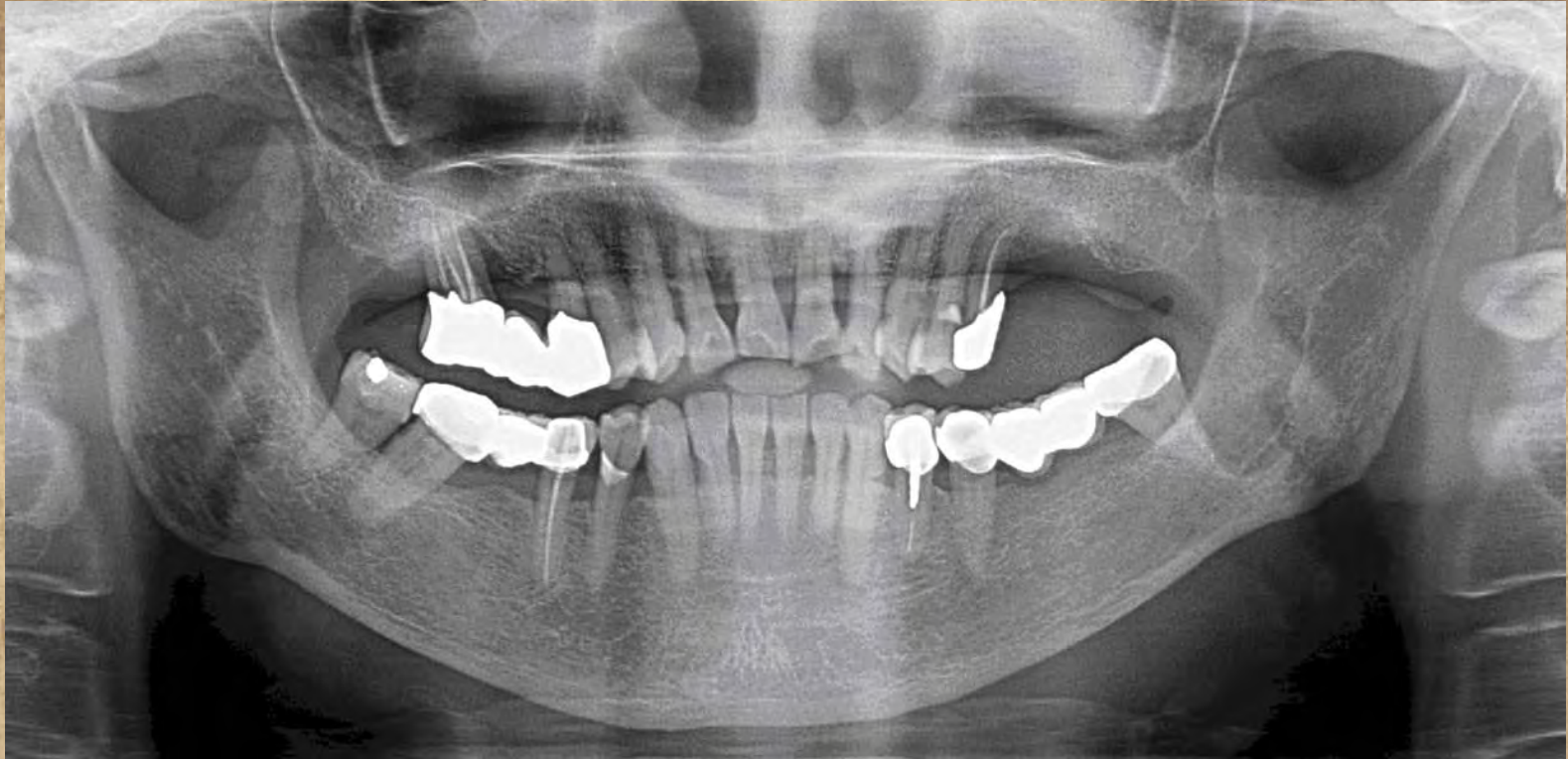


Radiographic Examination



There is a well-defined multilocular irregular shaped radiolucence with corticated margin, contains fine radiopaque except superior border over left posterior mandibular area . The lesion extends from the distal root of tooth 38 up to half of left ramus area, and from left retromolar area down to mandibular body, measuring about 3.0 x 2.0 cm in diameter. The lesion suspect involved to mandibular canal.

Radiographic Examination



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CT report

- Image finding:
 - There is a marked artifact from dental prosthesis.
 - The oral cavity cannot be well evaluated in this study.
 - There is a suspicious soft tissue nodule at the left retromolar area.
 - An indentation at adjacent mandible is present.
- Impression:
 - Suspect a soft tissue nodule at the left retromolar area with bony indentation.



Working diagnosis

Inflammation, cyst or neoplasm?

	Our case	Inflammation	Cyst	Neoplasm
Color	Pink	Red	Normal	Variable
Fever	-	+	-	-
Consistency	Rubbery	Rubbery	Soft	Variable
Discharge	-	+	-	+/-
Pain	+	+	-	+/-
Duration	weeks	Days	Years	Months



Cyst or neoplasm



Benign or malignant?

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

—————→ Benign



Peripheral or intrabony?

	Our case	Peripheral	Intrabony
Consistency	Rubbery	Rubbery	Firm
X-ray margin	Well-defined	Poor-defined	Well-defined
Bony destruction or expansion	+	-	+

—————→ Intrabony



Working diagnosis

Intrabony benign tumor or cyst

● Benign Tumor

■ Odontogenic

- Calcifying Epithelial Odontogenic Tumor(CEOT), Pindborg Tumor
- Adenomatoid Odontogenic Tumor
- Ameloblastic Fibroodontonma
- Ameloblastoma (Desmoplastic)

■ Cyst

- Calcifying Odontogenic Cyst (Gorlin Cyst)



Working diagnosis

- The List (more possible → less)
 1. Calcifying Epithelial Odontogenic Tumor (CEOT), Pindborg Tumor
 2. Calcifying Odontogenic Cyst (Gorlin Cyst)
 3. Adenomatoid Odontogenic Tumor
 4. Ameloblastic Fibroodontoma
 5. Ameloblastoma



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	50 y/o	30-50 y/o
Site	Right retromolar area	Most on posterior mandible(57%)
Symptom/Sign	Swelling and pain	Slow-growing swelling Painless



Calcifying Epithelial Odontogenic Tumor(CEOT), Pindborg Tumor

Radiographic features	Our case	CEOT
Density	R/O + R/L	R/O + R/L
Border	Well-defined with corticated margin	Well-defined 20% corticated margin (20% Ill-defined) Scalloped



Ameloblastic Fibroodontoma

- Etiology
 - Mixed odontogenic tumor
 - Epithelial (enamel) and Mesenchymal tissue (dentin , pulp) inductive
 - Arises possibly from
 - Dental papilla , immature fibrous tissue



Ameloblastic Fibroodontonma

	Our case	Ameloblastic Fibroodontonma
Gender	Female	none
Age	50 y/o	10 y/o
Site	Right retromolar area	Mandible posterior (54%)
Symptom/Sign	Swelling and pain	Asymptomatic and painless swelling of the affected bone in large lesion
Effect		Bony destruction and expansion



Ameloblastic Fibroodontoma

Radiographic features	Our case	Ameloblastic Fibroodontoma
Density	R/O + R/L	R/O + R/L
Border	Well-defined with corticated margin	Well-defined circumscribed RL



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	50 y/o	20~70 y/o
Site	Right retromolar area	Anterior maxilla
Symptom/Sign	Swelling and pain	Rare pain or paresthesia



Ameloblastoma

Radiographic features	Our case	Ameloblastoma (Desmoplastic type)
Density	R/L+R/O	R/L+R/O (Dense fibrous septa)
Border	Well-defined with corticated margin	Scalloped, well-defined, well-corticated



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	50 y/o	Diagnosed between 20-30y/o, average 33 y/o
Site	Right retromolar area	Most on Incisors and Canine areas (65%)
Symptom/Sign	Swelling and pain	Unspecific



Calcifying Odontogenic Cyst (Gorlin Cyst)

Radiographic Features	Our case	Calcifying Odontogenic Cyst(Gorlin Cyst)
Density	R/L + R/O	R/L + R/O
Border	Well-defined with corticated margin	Well-defined



Adenomatoid Odontogenic Tumor

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



Adenomatoid Odontogenic Tumor

	Our case	AOT
Gender	Female	Both , male : female 2:1
Age	50 y/o	10~20 y/o
Site	Right retromolar area	Most on lower Incisors and upper Canine areas(53%)
Symptom/Sign	Swelling and pain	<u>Asymtomatic</u> swelling



Adenomatoid Odontogenic Tumor

Radiographic Features	Our case	AOT
Density	R/L + R/O	R/L + R/O
Border	Well-defined with corticated margin	Well-defined



Clinical Impression

- Calcifying Epithelial Odontogenic Tumor (CEOT), Left mandible



Histological Pathologic Report

送檢時間：101/05/03 報告時間：101/05/09 送檢醫師：吳崇維醫師

- **Pathological diagnosis:**
 - Bone, mandible, left, retromolar, incision, calcifying epithelial odontogenic tumor, clear type
- **Gross Examination :**
 - The specimen submitted consisted of 2 soft tissue fragments in 1 bottle, measuring up to 0.7 x 0.4 x 0.2 cm, fixed in formalin. Grossly, they are brown in color and rubbery in consistency

- Microscopic Examination :
 - Microscopically, it is characterized by clusters of round ,clear or faintly eosinophilic cell together with sheets, or strands of pleomorphic, slightly eosinophilic epithelial cells within a connective tissue stroma. Also homogeneous hyaline areas suggestive of amyloid-like materials are seen.
 - Immunohistochemical staining of pan-keratin :
 - clear cell (+) ,epithelial tumor cells (+) .
 - PAS (-) ,PASD (-) , mucicarmine stain (-) .
- Based upon the above finding, it shows **calcifying epithelial odontogenic tumor**, clear cell type.



TREATMENT PLAN

Treatment procedure

- 101.04.11
 - Pano finding: Mild radiolucent image over 37 distal side, size 1.2x1.8 cm
 - Imp: Odontogenic tumor, left mandible
 - Arrange CT exam and check BUN/Cr
- 101.05.02
 - CT Imp(101.04.25):
Suspect a soft tissue nodule over left retromolar area with bony indentation
 - Incisional biopsy



Treatment procedure

- 101.05.09
 - HP report:
 - Calcifying epithelial odontogenic tumor (clear cell type), left retromolar region of mandible, bone
 - Special stain :
 - Congo red: (+)
 - Mucin stain/ PAS /PASD: (-)
 - Arrange OP on 101.06.01
 - OP: Excision+ Bone trimming + 37 & 48 extraction



Treatment plan

- It was originally believed that CEOT had about the same biologic behavior as the ameloblastoma.
 - Experience indicated that it tends to be less aggressive.
- Tx.: conservation local resection to include a narrow rim of surrounding bone appears to be the treatment of choice.





廣重短

醫學倫理討論

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。

行善原則(Beneficence)

- 手術的介入對於陳女士來說是否是一個較佳的治療方式?

誠信原則(Veracity)

- 醫師對於陳女士是否有以誠信相對待?
- 病況與治療的急迫性?
- 治療方式(excision. resection)?預後?風險?後續的治療?

自主原則(Autonomy)

- 在說明清楚病情,各種治療方式及其預後與風險之後,是否有讓陳女士自主選擇所要的治療方式?
- 手術同意書與麻醉同意書一式兩份,由醫療機構人員先行完成「基本資料」之填寫。

不傷害原則(Nonmaleficence)

- 在治療(手術)的過程應與陳女士同意的治療方式相符合,醫師須盡自己所能減量減少對於病人的傷害
- 另外在詳細說病情時也不應給予病人過多的心理壓力

保密原則(Confidentiality)

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(Justice)

- 合理分配醫療資源
 1. 手術的必要性?
 2. 藥物的需求是否合理?
 3. 住院的時間?

醫學倫理總結

- 在病例方面(病兆描述,治療計畫,病人態度)應書寫詳盡
- 在進行治療之前,須請病人簽屬同意書
- 應在不違反醫學倫理的原則之下進行治療的行爲

References

- Oral and Maxillofacial Pathology 3rd ed
- Differential diagnosis of oral and maxillofacial lesions 5th ed
- 行政院衛生署-醫療機構施行手術及麻醉告知暨取得病人同意指導原則
- 台灣臨床倫理網絡
<http://www.tcen.org.tw/index.asp>



Thanks for attention!