

# ***CASE REPORT***

## ***Intern - I組***

組員

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指導老師

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# General Data

Name: 謝XX

Gender: Male

Age: 16

Occupation: 學生

Attending V.S. : 王文岑 醫師

First visit: 98/5/20



# Chief Complaint

A swelling mass over lower left vestibule area, extending to nearby teeth for 1 month

# Present Illness

This 16-year-old male patient is suffered from a swelling mass over his left lower vestibule area and the nearby teeth for 1 month. He went to LDC for help a week ago, and the doctor suggested him to come to our OPD for further examination and treatment.



# Past History

## ➤ Past Medical History

- Drug allergy: Denied
- Taking drug: Denied
- Systemic disease: Denied
- DM: Denied
- HT: Denied

## ➤ Past Dental History

- OD restoration Tx.

# Risk Factors Related to Malignancy

- Alcohol: (-)
- Betel quid: (-)
- Smoking: (-)

# Intraoral Examination

An irregular shaped mass with smooth surface, sessile base, normal color was found over left lower vestibular area and measured about 2.0X2.0 cm in diameter



# Physical Examination

- Mobility: Fixed
- Consistency: Bony hard
- Fluctuation (-)
- Pain (-)
- Tenderness (-)
- Induration (-)
- Lymphadenopathy( -)
- EP test: Tooth 34 (+), tooth 35 (-), tooth 36 (+)



# Radiographic Examination (Panoramic film)



There is a well-defined unilocular oval shaped radiolucence with a regular corticated margin between the tooth 34 and 36 apical area, extending from tooth 34 apex area to the furcation area of tooth 36 and from tooth 45 mesial side to mandibular canal upside, measuring approximately 3.4X2.4 cm in diameter. The lesion push tooth 45 and 46 away and causes tooth 34, 35, and 36 mesial root resorption

# Radiographic Examination (Panoramic film)



- Unerupted teeth: 18, 28, 38, 48  
Restoration: 16(O), 17(O), 26(O), 27(O), 36(O), 37(O), 46(O), 47(O)

# Radiographic Examination (Periapical film)





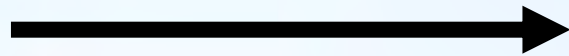
# Radiographic Examination (Occlusal film)





# Central or Peripheral Lesion ?

- No mucosal lesion
- Bone destruction (+)



**Central**

# Inflammation ? Cyst ? Neoplasm?

- Fever or local heat? (-)
- Pain (-)
- Swelling (+) → bony hard swelling
- Purulent drainage (-)



**Cyst or Neoplasm**

# — 、Cyst

~~Developmental cyst~~

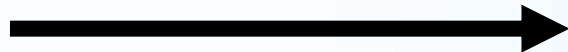
Odontogenic cyst

Odontogenic cyst

## 二、Neoplasm

### → Benign or Malignant ?

- Pain (-)
- Tenderness (-)
- Lymphadenopathy (-)
- Ulceration (-)
- Induration (-)
- Smooth surface
- Well-defined radiolucency



**Benign Tumor**



# Benign Tumor

- Odontogenic
- Non-odontogenic

**Central odontogenic cyst**  
or  
**Central odontogenic benign tumor**  
or  
**Central non-odontogenic benign tumor**

# Working diagnosis

## Cyst

- Odontogenic keratocyst

## Odontogenic tumor

- Ameloblastoma

- Central odontogenic fibroma

- Ameloblastic fibroma

## Non-odontogenic tumor

- Central giant cell granuloma



# Cyst

## Odontogenic keratocyst



# Odontogenic keratocyst

## Features

- It is a distinctive form of developmental odontogenic cyst. It arises from cell rests of the dental lamina
- Common site:  
Posterior mandible body and ascending ramus
- Usually asymptomatic
- Size :variable
- Well defined radiolucent area with smooth and corticated margin (may appear multilocular, particularly in posterior body and ascending ramus)



# Odontogenic keratocyst

	Our case	Odontogenic keratocyst
Gender	Male	Slightly male predilection
Age	16y/o	10~40y/o
Frequency		Make up 3%~11% of all odontogenic cyst
symptom	Bony expansion	Asymptomatic
Site	Lower left buccal vestibular area	49% in postetrior mandible body and ascending ramus

# Odontogenic keratocyst

Our case



Odontogenic keratocyst



# **Odontogenic tumor**

Ameloblastoma

Central odontogenic fibroma

Ameloblastic fibroma



# Ameloblastoma

## Features

- May arise from rests of dental lamina
- Common site:  
About 85% of occur in the mandible, most often in the ascending area
- Often asymptomatic.
- A painless swelling or expansion of the jaw is the usual clinical presentation
- X-ray finding often “soap-bubble” or “honeycombed” appearance





# Ameloblastoma

	Our case	Ameloblastoma
Gender	Male	沒差別
Age	16 y/o	38~40y/o
Frequency		25% of all odontogenic tumor.
Symptom	Swelling mass over his left lower vestibule area and the nearby teeth	Asymptomatic
Site	Left lower vestibule area and the nearby teeth	80~85% occur in the mandibular molar ascending area.
Color	Normal	Bluish to normal
Shape	Dome, sessile	Irregular scalloping
Size	2x2cm	? (外觀通常都很大)
Surface	Smooth	Smooth
Duration	1 month	?

# Ameloblastoma

Our case



Unicystic ameloblastoma



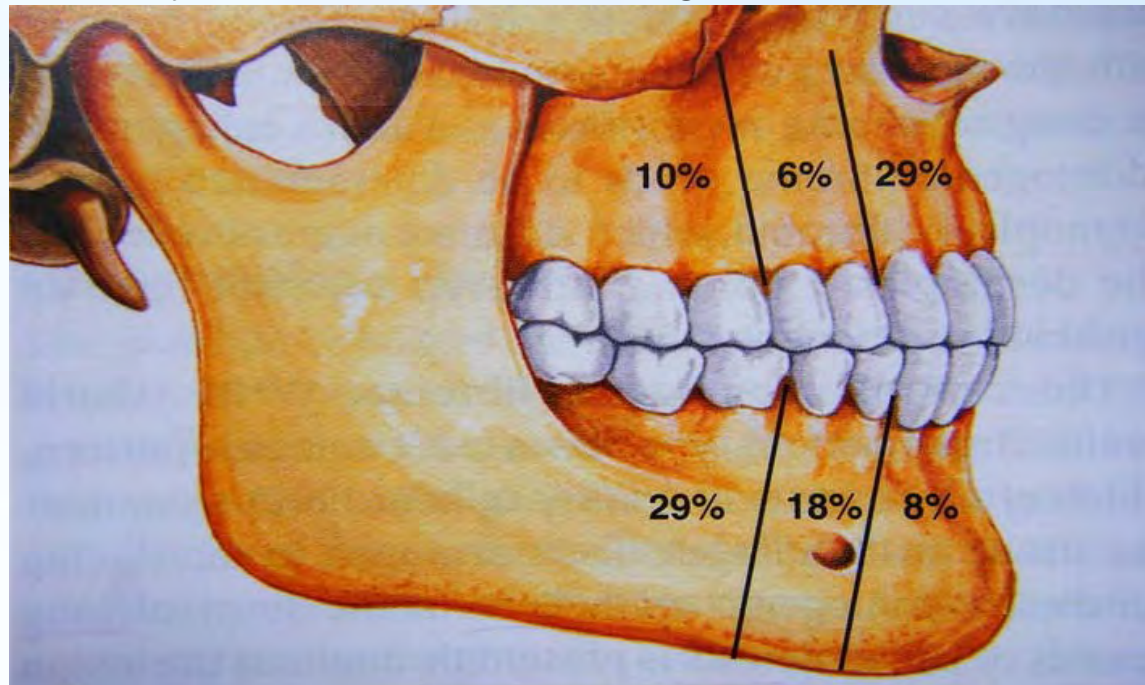
# Central Odontogenic Fibroma

## Clinical Features:

4-80 years (mean 40)

Female: male = 2.2:1

- 1/3 associated with unerupted tooth
- Smaller → Asymptomatic
- Bigger → Localized bony expansion or loosening of teeth





# Central Odontogenic Fibroma

## Radiographic Features:

- Smaller → well defined, unilocular, radiolucent lesions
- Smaller → Periradicular area of erupted teeth
- Bigger → Multilocular radiolucence, sclerotic border, root resorption, root divergence
- 12% exhibit radiopaque flecks



# Central Odontogenic Fibroma

	Our case	Central Odontogenic Fibroma
Gender	Male	Female
Age	16y/o	Mean age : 40 y/o
Symptom	Swelling mass over his left lower vestibule area and the nearby teeth	Asymptomatic or localized bony expansion or loosening of teeth if reach a larger size
Site	Left lower vestibule area and the nearby teeth	Most in ant. maxilla and post. mandible
Size	2x2cm	-
Shape	Unilocular	Small: unilocular Big: multilocular
Outline	Well-defined with a regular corticated margin	Well-defined with a sclerotic border
Relative density	Uniformly RL	Uniformly RL 12% exhibit radiopaque flecks



# Central Odontogenic Fibroma

Our case



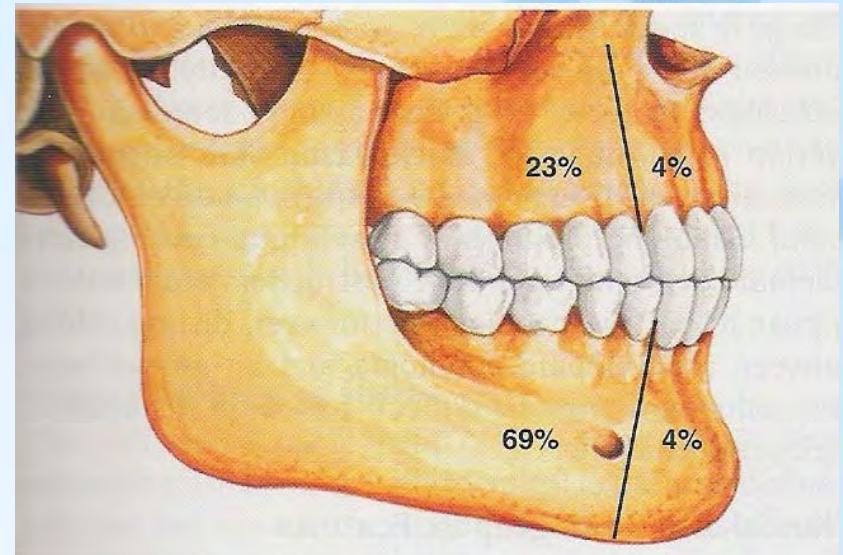
Central odontogenic fibroma



# Ameloblastic fibroma

## Features

- True mixed tumor in which epithelial and mesenchymal tissue are both neoplastic  
Most occur in younger patients: 20 y/o younger
- Common site: About 70% of occur in the posterior mandible
- Small : Asymptomatic  
Larger :swelling of the jaws
- X-ray finding: well-defined RL  
Small: Usually unilocular  
Larger: Multilocular



# Ameloblastic fibroma

	Our case	Ameloblastic fibroma
Gender	Male	Male
Age	16 y/o	First two decades
Symptom	Swelling of jaw	No symptoms unless or swelling of jaws
Site	L't posterior mandible	Posterior mandible (70%)
X-ray finding	A well defined RL with a sclerosis margin	Small- a well defined RL with a sclerosis margin




# Ameloblastic fibroma

Our case



Radicular cyst





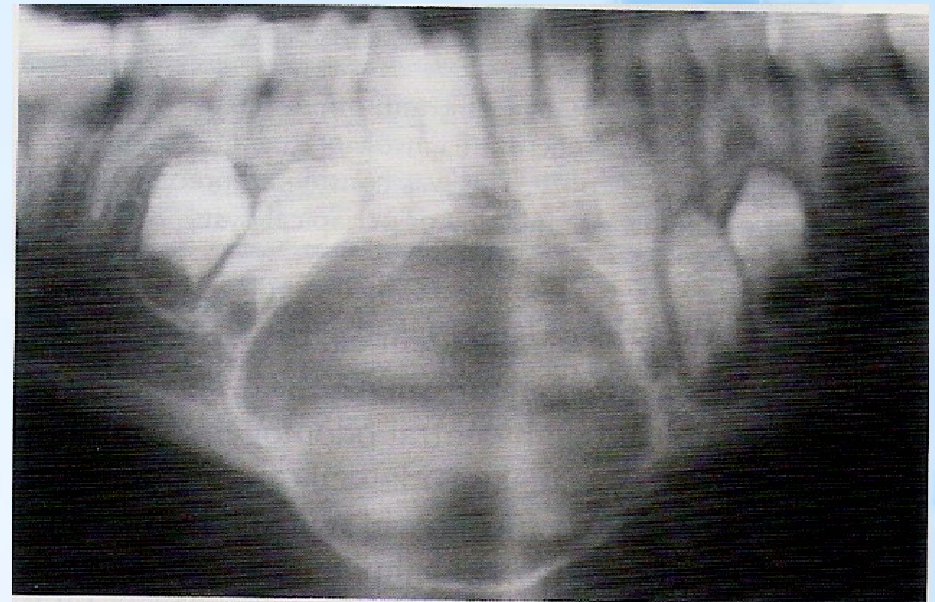
# **Non-odontogenic tumor**

## Central giant cell granuloma



# Central giant cell granuloma

- Nonneoplastic lesion
- Age: 60% before 60 y/o
- Sex: Female
- Site: 70% arise in mandible, more common in anterior portion
- Sign & symptom: No symptom, painless bony expansion
- X-ray finding: Small→unilocular
- Large→Multilocular



	Our case	Central giant cell granuloma
Gender	Male	Female
Age	16y/o	60% before 60 y/o
Symptom	Swelling mass over his left lower vestibule area and the nearby teeth	No symptom, painless bony expansion
Site	Left lower vestibule area and the nearby teeth	70% arise in mandible, more common in anterior portion
Size	2x2cm	5x5 mm to more than 10 cm in size
Shape	Unilocular	Small: Unilocular Big: Multilocular
Outline	Well-defined with a regular corticated margin	Well-defined without a sclerotic border

# Central giant cell granuloma

Our case



Central giant cell granuloma



# Final Diagnosis

## Cyst

Odontogenic keratocyst, left mandibular body

## Odontogenic tumor

Ameloblastoma

## Non-odontogenic tumor

Central giant cell granuloma





*Thanks for your attention*