



# Case Report

指導老師:

V.S. : 林立民 陳玉昆醫師 王文岑醫師

Resident : 陳靜怡醫師 謝牧諺醫師

Int : 賴彥成 吳美萱 吳筱婷 傅琬茹

日期: 99.03.29

# General Data

- Name : 陳建宏
- Gender : Male
- Age : 25
- Occupation : 工人
- Attending V.S. : 陳中和醫師
- First visit : 99. 2. 24



# Chief Complaint

- Refer from 屏基 for checking mandibular expansion and huge radiolucency over mandibular body of radiographic finding.



# Present Illness



- This 25 y/o male suffered from lower facial swelling for half a year. He went to LDC for help, and the doctor suggested him to go to 屏基 for further examination. 屏基 took the X-ray, and a huge radiolucency image was found over mandibular body, then the P`t was suggested to our OMS department for consultation and further examination.

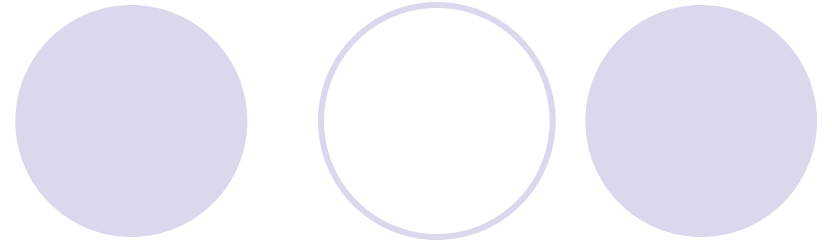
# Past History



- Past medical history
- Drug allergy: denied
- Systemic disease: denied
- Herniation (小學時開刀)
- Past dental history
- No record

# Risk factors

- Alcohol: (-)
- Betel nut: (-)
- Cigarette: (-)

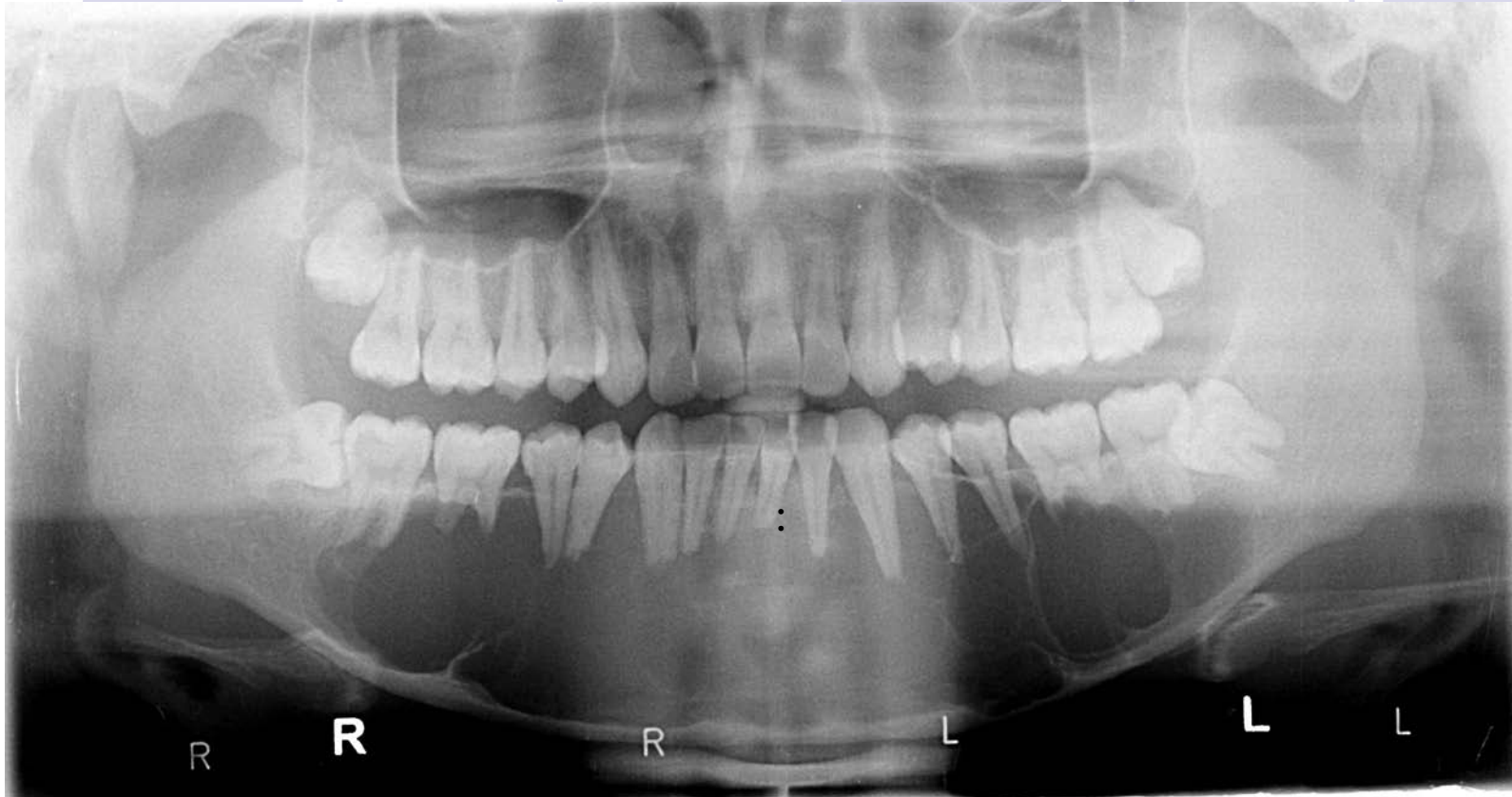


# Intraoral examination

- There are multiple exophytic masses with smooth surface over mandibular buccal and lingual side from tooth 37 to 47
- Buccal plate perforation was noted over anterior mandible
- Tooth mobility: 36 to 46

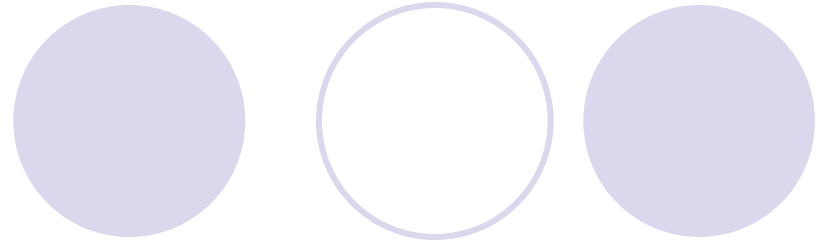
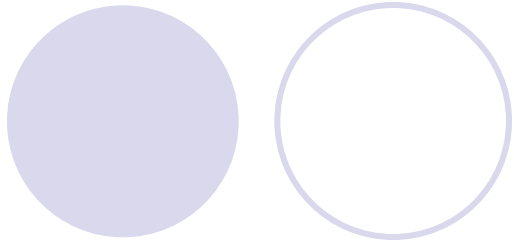


# Radiographic examination



- There is a well-defined multilocular, soap bubble appearance radiolucent lesion with a corticated margin over mandibular body extending from distal aspect of tooth 47 to mesial aspect of tooth 37, and from inferior mandibular border up to alveolar crest of 36 to 46, measuring approximately 12.2 X 4.3 cm in diameter. Root resorption of tooth 31,32,33,34,35,36,41,42,43,44,45,46, downward displacement of bilateral inferior alveolar canal, and thinning of cortical plate was noted. Loss of lamina dura over tooth 36 to 47.
- Impaction: 18, 28, 38, 48
- Sinus: clear
- TMJ: Unremarkable

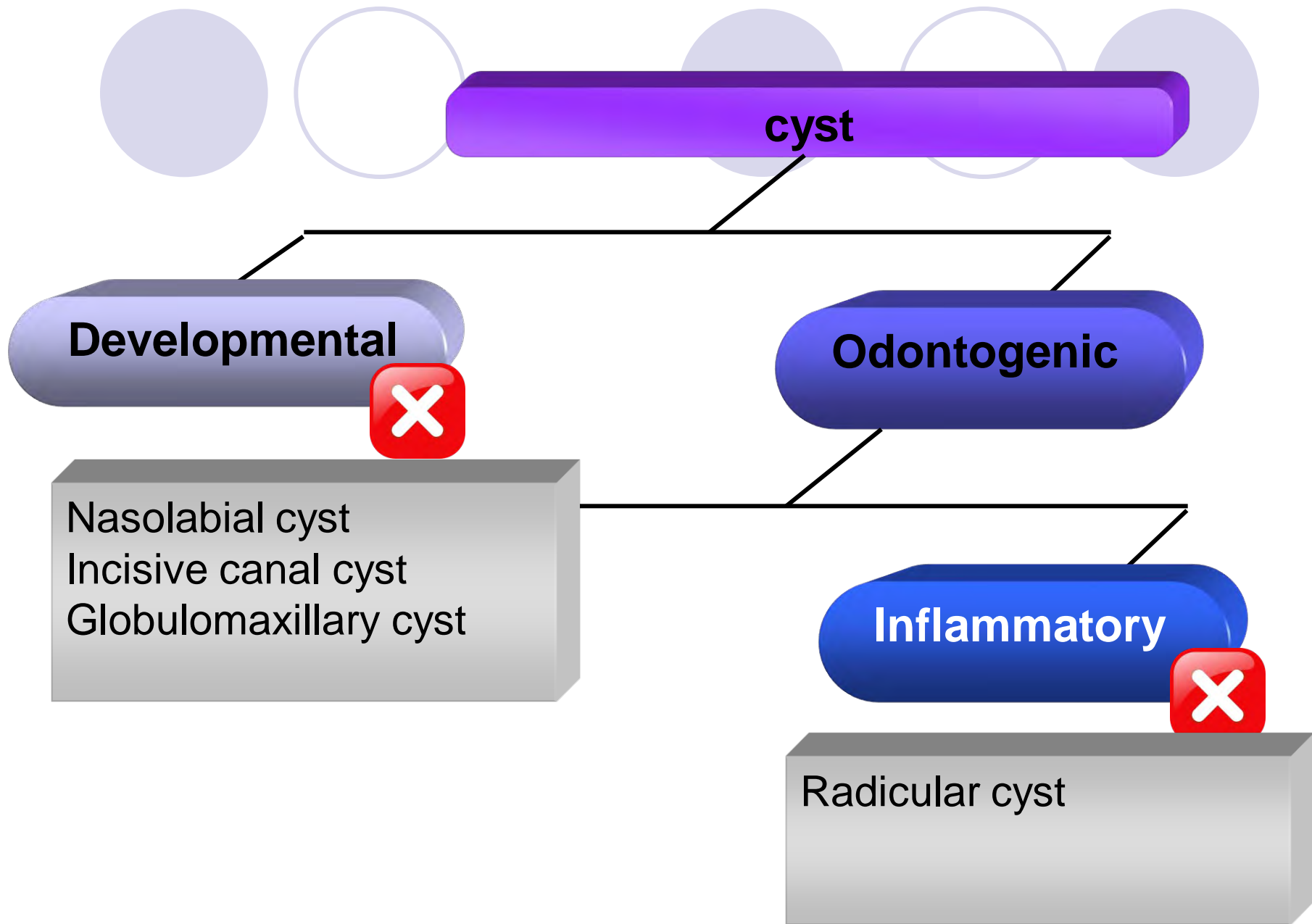




**Inflammation ? Cyst ? Neoplasm ?  
Infection ?**

**Inflammation ? Cyst ? Neoplasm ?**  
**Infection ?**

- Fever or local heat (-)**
  - Color: normal**
  - Pain (-)**
  - No purulent drainage was present**
- **R/O inflammation & infection**
- **Cyst or Neoplasm**



The slide features five light purple circles arranged in two rows. The top row has three circles, and the bottom row has two circles. The word "Neoplasm" is centered over the top row, and "Benign or malignant ?" is centered over the bottom row.

Neoplasm

Benign or malignant ?

## Benign

1. Movable (except palate)
2. Unattached to skin or mucosa (except palate)
3. No ulceration of skin or mucosa
4. Slow growth, Long duration
5. No pain
6. No facial nerve palsy
7. No bony invasion Features
8. well-defined radiolucency with corticated margin

## Malignant

1. Induration
2. Fixed to overlying skin or mucosa
3. Ulceration of skin or mucosa
4. Rapid growth; growth spurt, Short duration
5. Pain, often severe
6. Facial nerve palsy
7. Bony invasion
8. ill-defined radiolucency without corticated margin

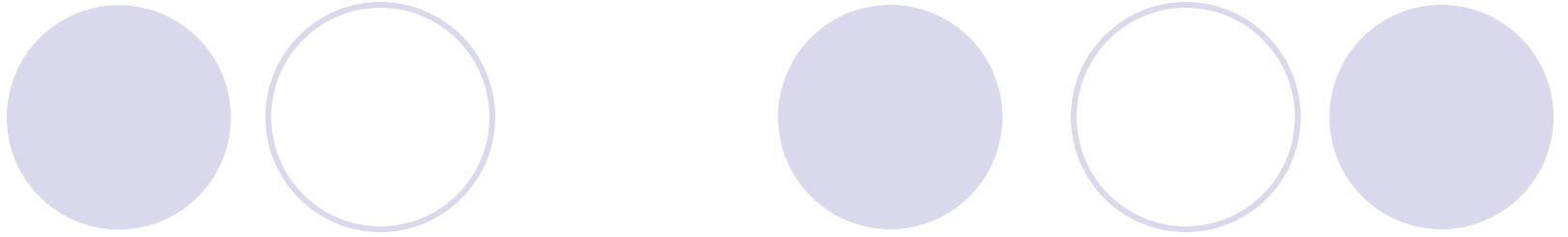
# Peripheral or intrabony origin?

- Adjacent mucosa seems normal appearance
- Induration:(-)
- Fluctuation:(-)
- Consistency: hard
- Mobility: fixed

**Peripheral**



**Intrabony**



- **Odontogenic developmental cyst**
- **Benign intrabony tumor**

# Differential diagnosis

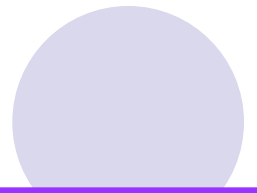
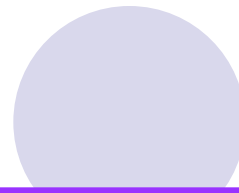


- Ameloblastoma
- Odontogenic keratocyst
- Glandular odontogenic cyst
- Central giant cell granuloma





# Ameloblastoma



## Our case

## Ameloblastoma

gender

male

No sexual predilection

age

25 y/o

rare in younger, 30~80 y/o

site

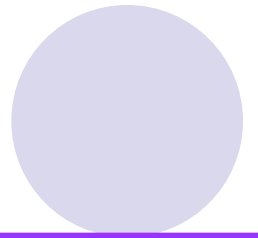
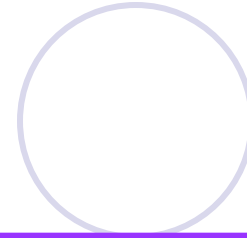
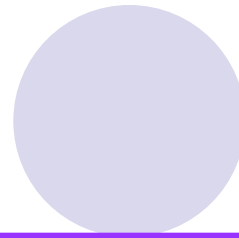
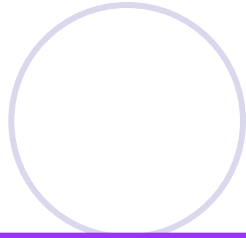
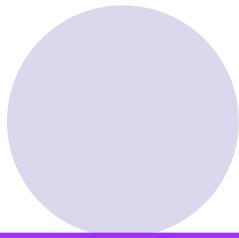
Mandibular body  
(37 to 47)

in mandible, posterior region

swelling

(+)

(+)



## Our case

## Ameloblastoma

consistency

hard

hard

pain

(-)

(-)

tenderness

(-)

(-)

induration

(-)

(-)

LAP

(-)

(-)

## X-ray finding

## Our case

## Ameloblastoma

Border

well-defined cortical  
boundary

well-defined cortical  
boundary

Radiodensity

radiolucency

radiolucency

Effect on  
surrounding  
structures/adjacent  
teeth

Bony hard swelling,  
causing root resorption

Buccal and lingual cortical  
expansion.  
Resorption of the roots of teeth.  
Teeth may be displaced and  
become mobile.

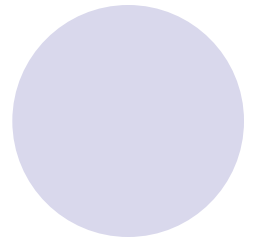
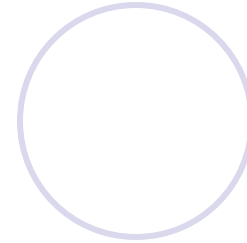
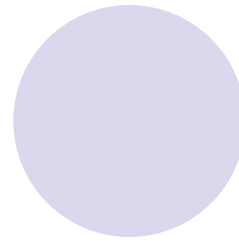
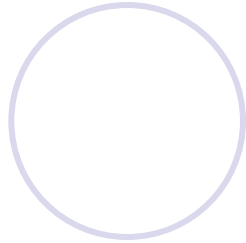
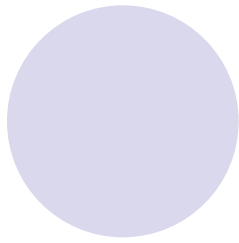
Unilocular/  
multilocular

Multilocular

Multilocular / unilocular



**Odontogenic keratocyst**



## Our case

## Odontogenic keratocyst

gender

male

A slight male predilection

age

25 y/o

from infancy to old age  
about 60% found in 10 ~ 40 y/o

site

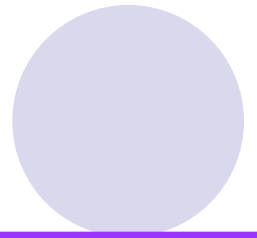
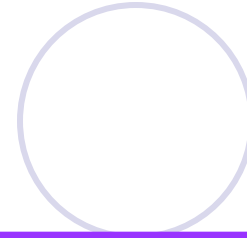
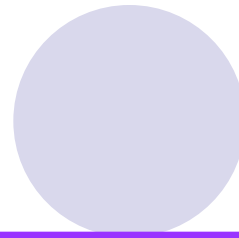
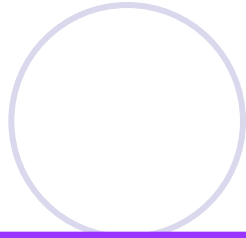
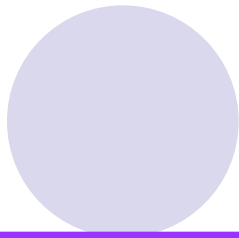
Mandibular body  
(37 to 47)

Most in posterior body of the  
mandible and ramus

swelling

(+)

(+)



## Our case

## Odontogenic keratocyst

consistency

hard

Hard

pain

(-)

(-) / (+) If larger

tenderness

(-)

(-)

induration

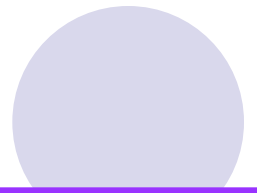
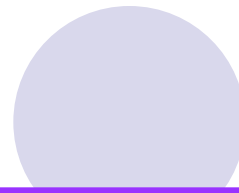
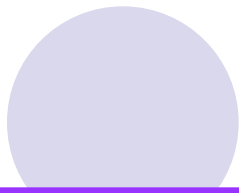
(-)

(-)

LAP

(-)

(-)



## X-ray finding

## Our case

## Odontogenic keratocyst

Border

well-defined cortical boundary

well-defined cortical boundary

Radiodensity

radiolucency

radiolucency

Effect on surrounding structures/adjacent teeth

Bony hard swelling, causing root resorption

**No obvious bone expansion.**  
Occasionally expand and perforate the bone

**Root resorption uncommon**

Unilocular/  
multilocular

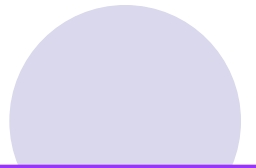
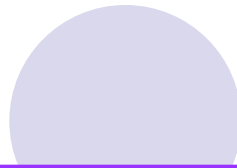
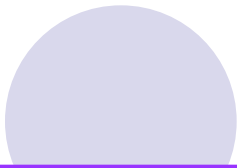
Multilocular

Unilocular / multilocular





**Glandular odontogenic cyst**



## Our case

## Glandular odontogenic cyst

gender

male

no predilection

age

25 y/o

Most in middle-aged adults

site

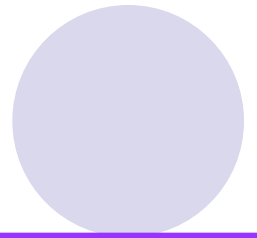
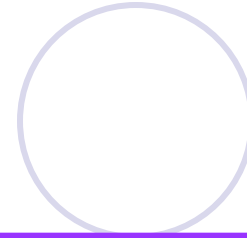
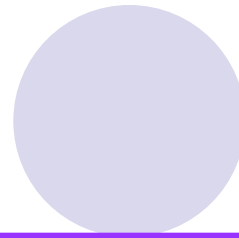
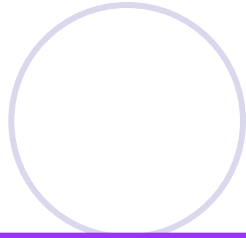
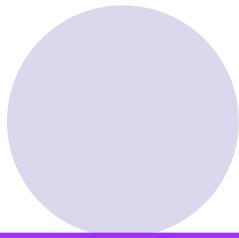
mandibular body  
(37 to 47)

anterior region of the jaw (cross  
the midline)

swelling

(+)

(+)



## Our case

## Glandular odontogenic cyst

consistency

hard

hard

pain

(-)

(-) ~ (+)

tenderness

(-)

(-)

induration

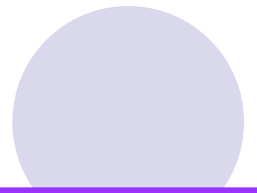
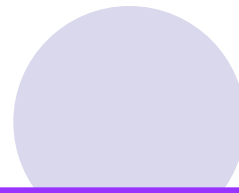
(-)

(-)

LAP

(-)

(-)



## X-ray finding

## Our case

## Glandular odontogenic cyst

Border

well-defined cortical boundary

well defined with a sclerotic rim

Radiodensity

radiolucency

radiolucency

Effect on surrounding structures/adjacent teeth

bony hard swelling, causing root resorption

bony hard swelling, **root divergence of the involved teeth**

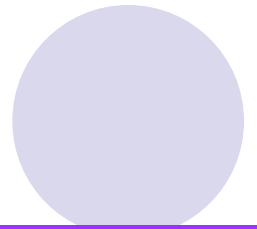
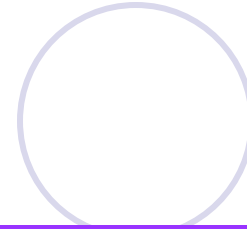
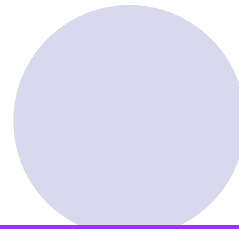
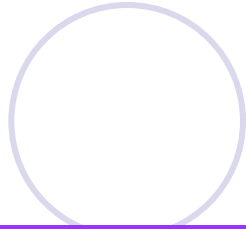
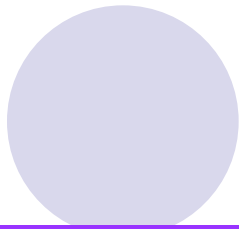
Unilocular/  
multilocular

multilocular

Multilocular/ unilocular



# Central Giant Cell Granuloma



## Our case

## Central giant cell granuloma

gender

male

female

age

25 y/o

2~80 y/o

60% occur before 30 y/o

site

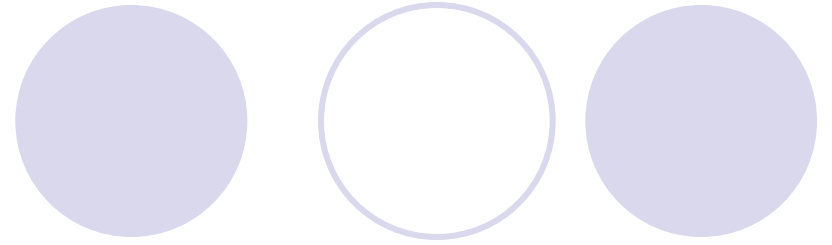
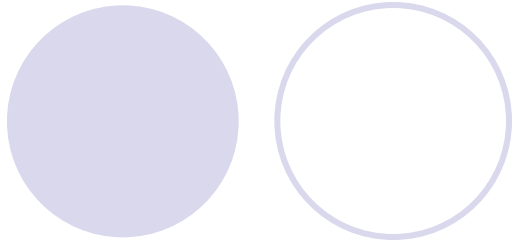
mandibular body  
(37 to 47)

anterior region of the jaw (cross  
the midline)

swelling

(+)

(+)



### Our case

### Central giant cell granuloma

consistency

hard

hard

pain

(-)

(-) ~ (+)

tenderness

(-)

(-)

induration

(-)

(-)

LAP

(-)

(-)

## X-ray finding

## Our case

## Central giant cell granuloma

Border

well-defined cortical  
boundary

Well-defined **generally  
without a corticated  
margin**

Radiodensity

radiolucency

radiolucency

Effect on  
surrounding  
structures/adjacent  
teeth

bony hard swelling, causing  
root resorption

bony hard swelling,  
perforation of the cortical  
bone plate, root  
resorption in aggressive  
lesion

Unilocular/  
multilocular

multilocular

unilocular or  
multilocular





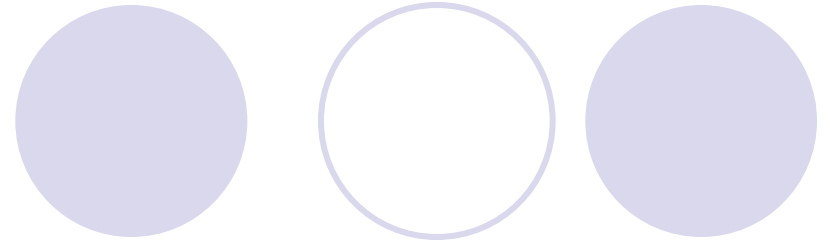
# Conclusion

1. Ameloblastoma
2. Odontogenic keratocyst
3. Glandular odontogenic cyst
4. Central giant cell granuloma

# Histopathologic report

- Microscopically, it is characterized by fragments of thin odontogenic epithelial lining and fibrous connective tissue. The epithelia lining consists of 6 to 8 layered, cuboid cells. The nuclei of the basal layer arrange in palisading appearance. Corrugation and wavy appearance of the lining are also observed. The surface of the lining is hyperkeratotic. Based upon the above findings, it shows **odontogenic keratocyst.**

Final Impression



- Odontogenic keratocyst,  
anterior mandible



**Thanks for your attention**