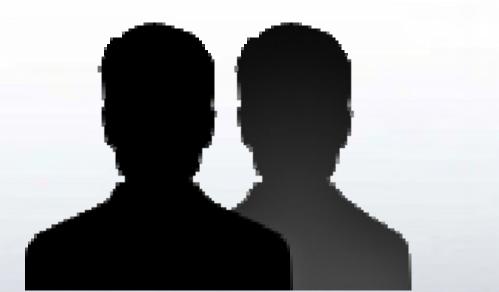




General data

- □ Name: case 4
- □ Chart No: XXXXXXX
- □ Sex: male
- Age: 35 y/o
- Native:Taiwan
- □ Marriage: No
- Occupation: Labor



Chief complaint

A mass over lower left buccal region for <u>3 months</u>.

Present illness

The 35 y/o male found a mass over left lower buccal vestibule for 3 months.

He felt a <u>little numbness</u> over lingual side <u>when touched by tongue tip</u>.

- Profile: straight
- Lymphadenopathy: (-)

There is a dome- shaped swelling located on attached gingiva between 33 &34



There is a little swelling over the lingual of tooth 33 34.

The adjacent mucosa seemed to be normal.





- □ Size : 1*0.8*0.4 cm³
- Base: sessile
- □ Color : normal
- Consistency: hard
- Pain: (-)
- Tenderness: (-)
- Mobility: fixed on bone
- □ Induration : (-)
- □ Tooth 33 34 vital test : (+)

Peg teeth: tooth12. 22

Plaque or calculus deposition

Lower teeth crowding

Past medical history

- Denied any systemic disease
- Denied any allergic reaction
- Denied any hospitalized history

Past Dental History

- Denied any dental treatment
- □ Attitude to dental treatment : acceptable

Personal habits

Risk factors related to malignancy :

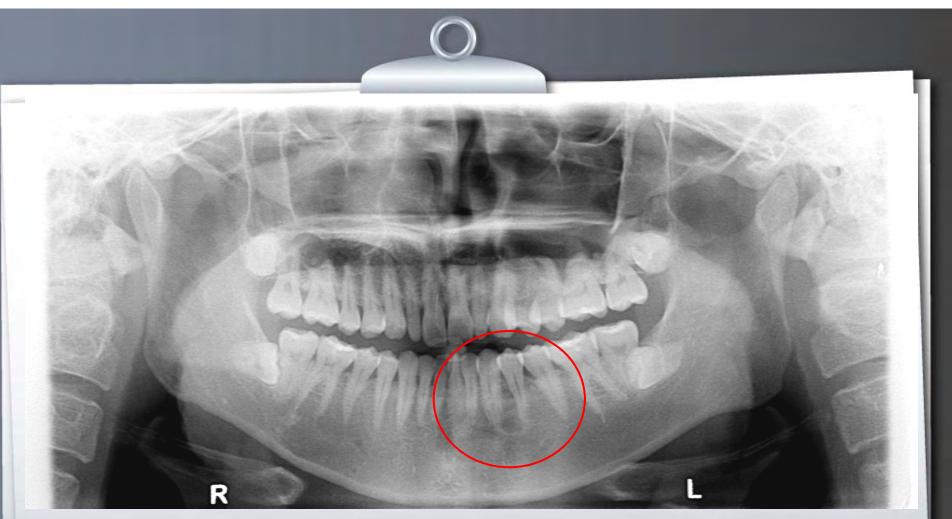
□ Alcohol drinking: (-)

□ Betel-quid chewing: (-)

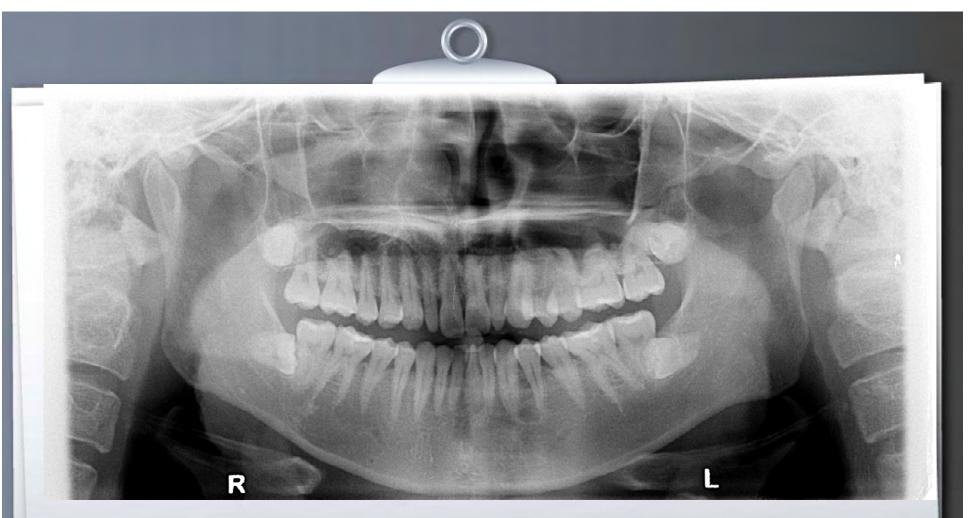
□ Cigarette smoking: (-)

Others :

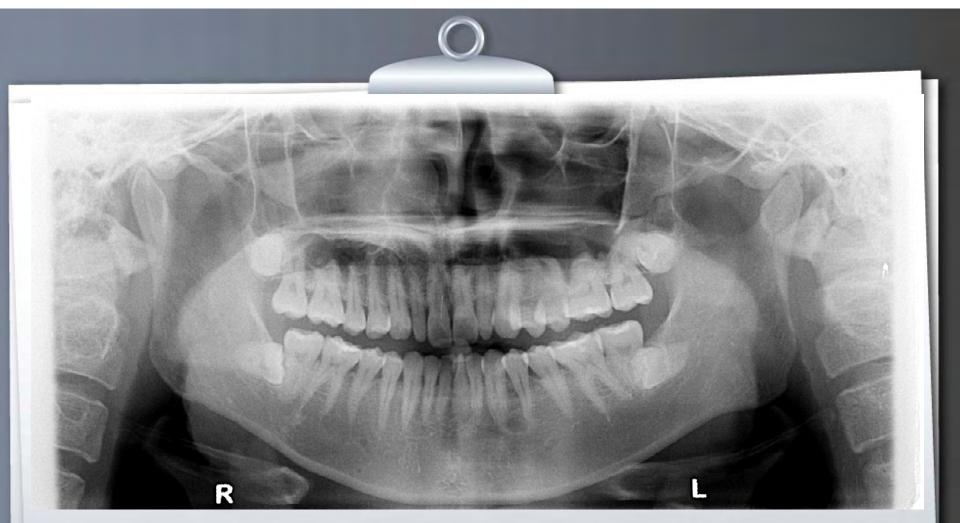
Denied other specific oral habits



Panoramic showed an well-defined unilocular round-shaped radiolucency with a corticated margin between the root of tooth33 34



Extending from the apical third down to the apex of tooth33 34 and from the distal side of the tooth 33 to the mesial side of the tooth 34, measuring approximately 0.5X0.6 cm in diameter.



- 18 mesio-angular
- 28 disto-angular

- □ 38.48 horizontal impaction
- Condyle & sinus finding: no remarkable findings

Apical Radiographic finding

- There is an round-shaped, well defined radiolucency between 33 &34 over the alveolar septum.
- Not showing root resorption
- PDL space mild widening.
- The diameter of the lesion is approximately 5X6(mm)



Apical Radiographic finding

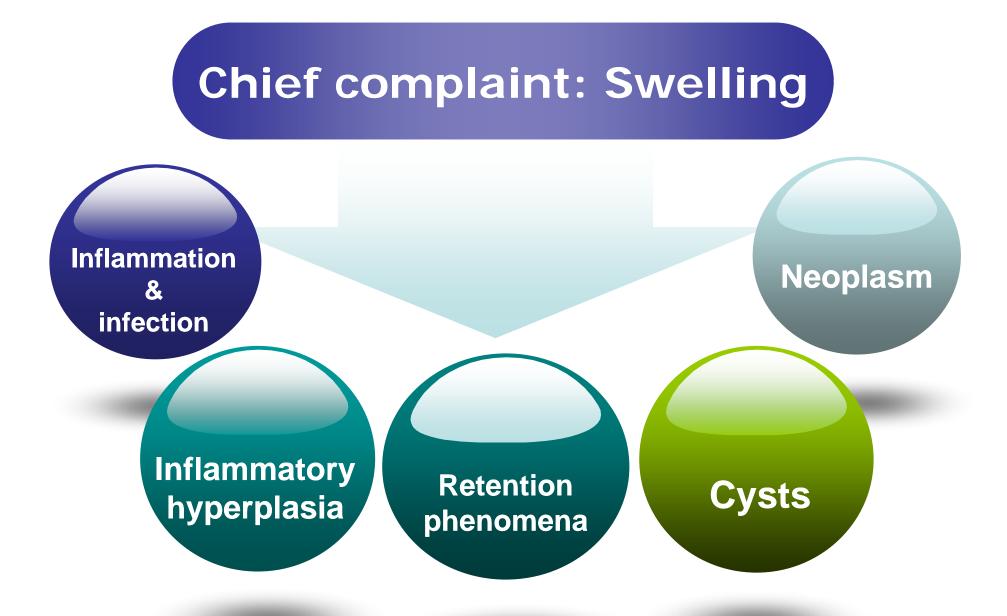
Bone density decreased of alveolar ridge between 33.34

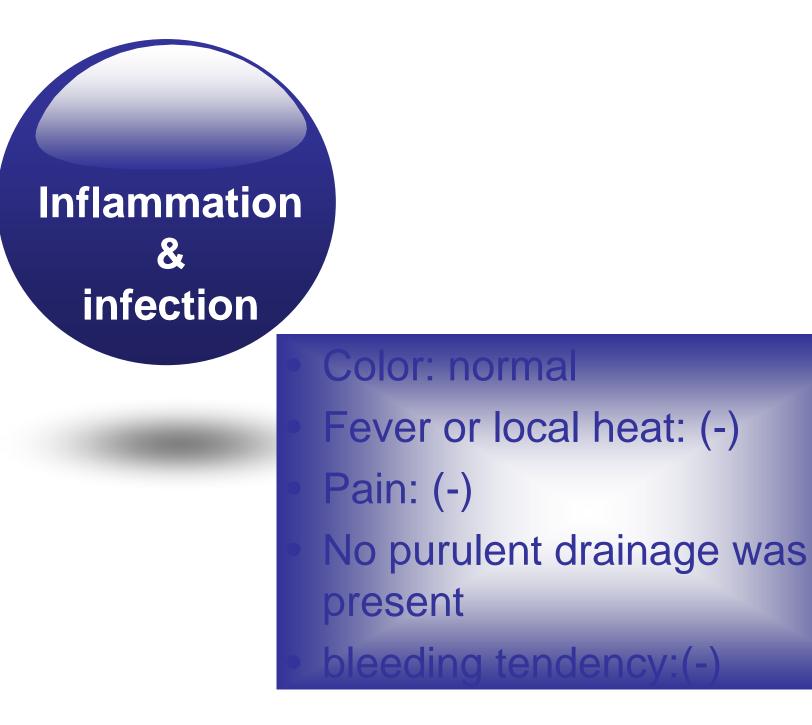
Discontinued of lamina dura











Inflammatory hyperplasia

No prosthesis irritation

- Color: normal
- Fever or local heat: (-)

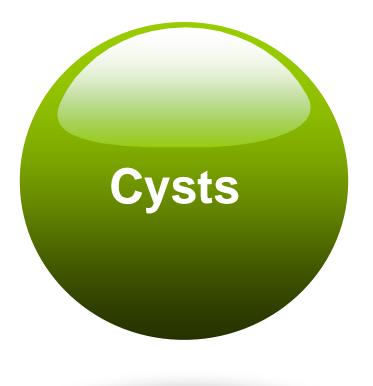
• Pain: (-)

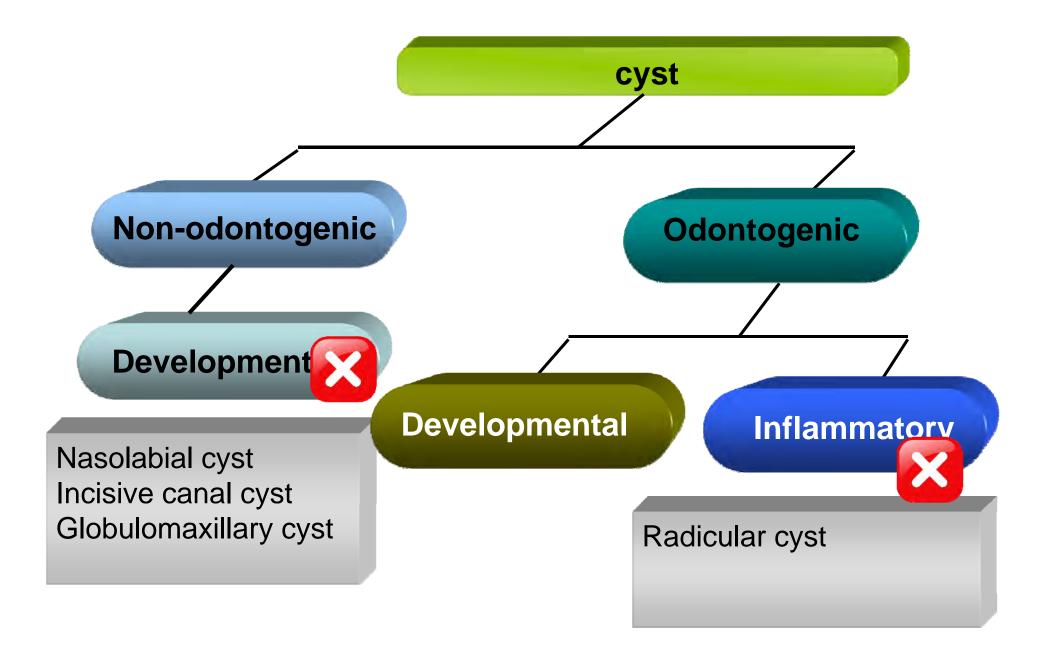
Retention phenomena

- Color: normal
- Fluctuation: (-)
- Consistency: hard

Chief complaint: Swelling









Odontogenic developmental cyst

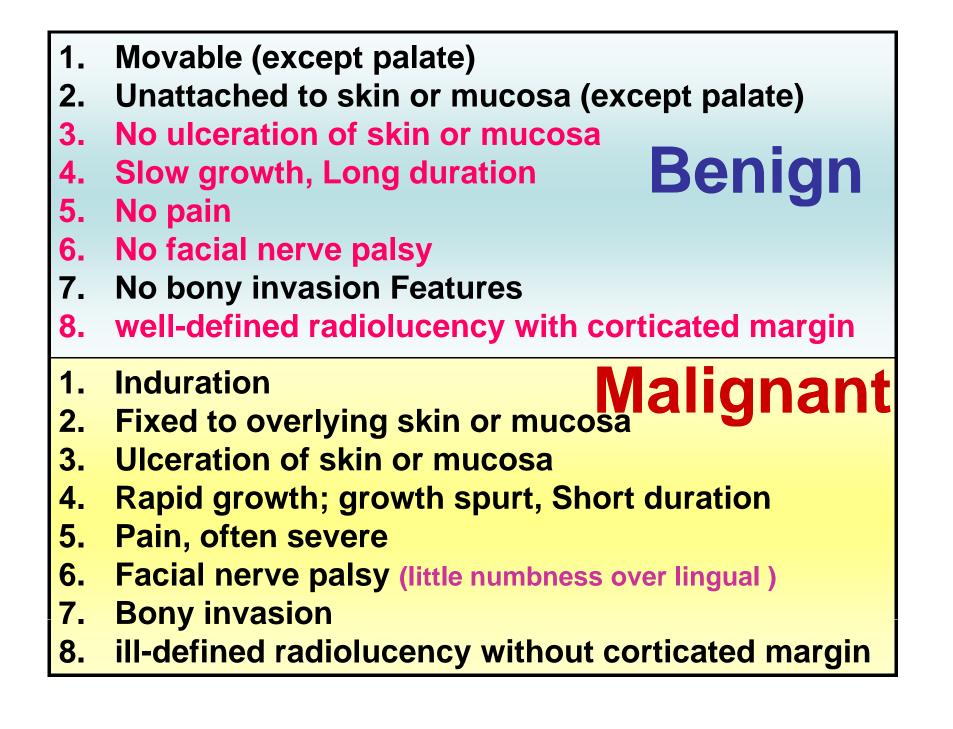




Neoplasm

or

Malignant tumor?

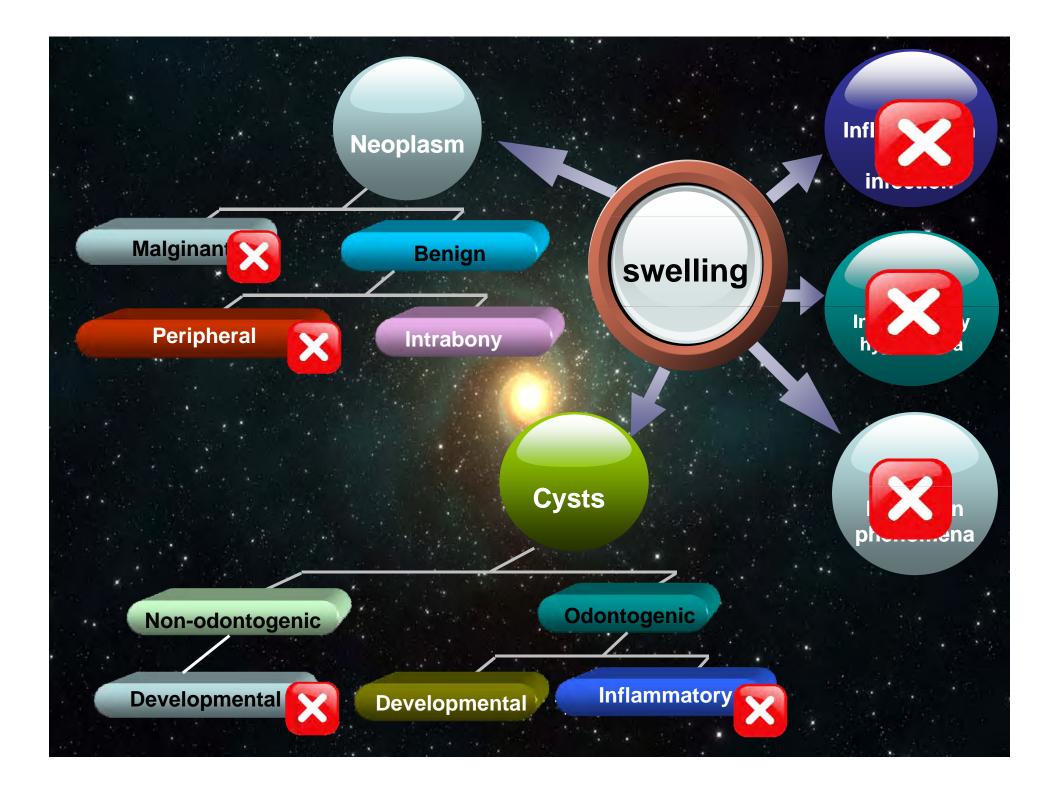


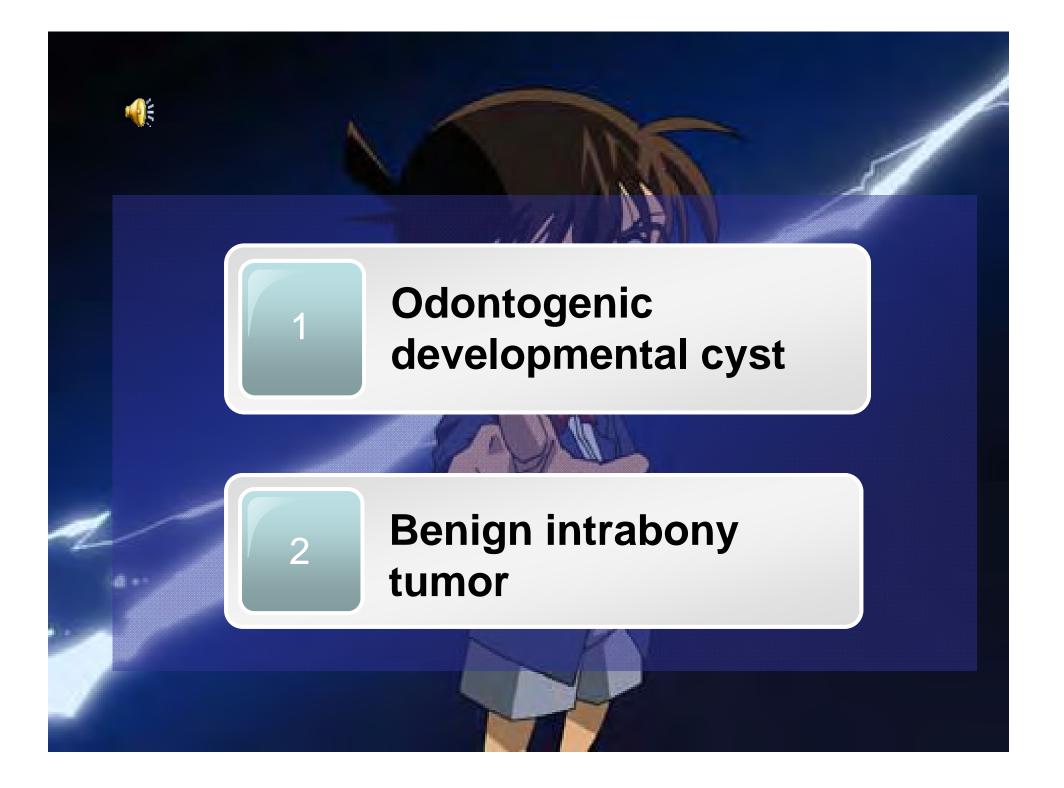
Peripheral or intrabony origin?

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

Peripheral

Intrabony





Working diagnosis

Odontogenic developmental cyst

- Lateral periodontal cyst
- Odontogenic keratocyst

Benign intrabony tumor

- 1. Ameloblastoma (solid type)
- 2. Central giant cell granuloma
- 3. Neurilemmoma
- Central Ossifying fibroma (Early stage)





Lateral periodontal cyst

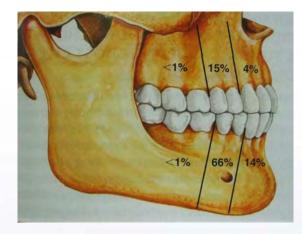
Clinical feature

- Asymptomatic
- Less than 1cm in diameter
- No sexual predilection
- □ 20~90 y/o

(the mean age is about 50 years)

Radiographic feature

- along the lateral root surface of a tooth
- Around 75~80% occur in the mandibular premolar-caninelateral incisor area
- Well-defined RL
- prominent cortical boundary
- Round or oval shape
- Rare large cyst have a more irregular shape



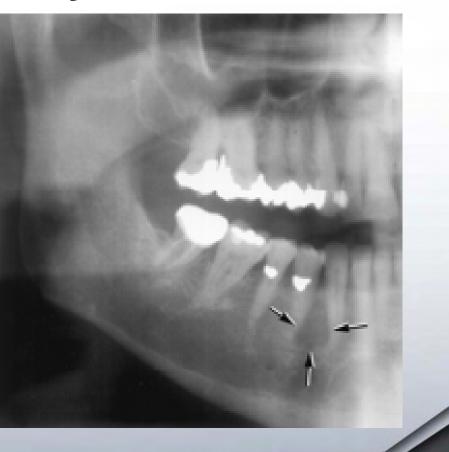


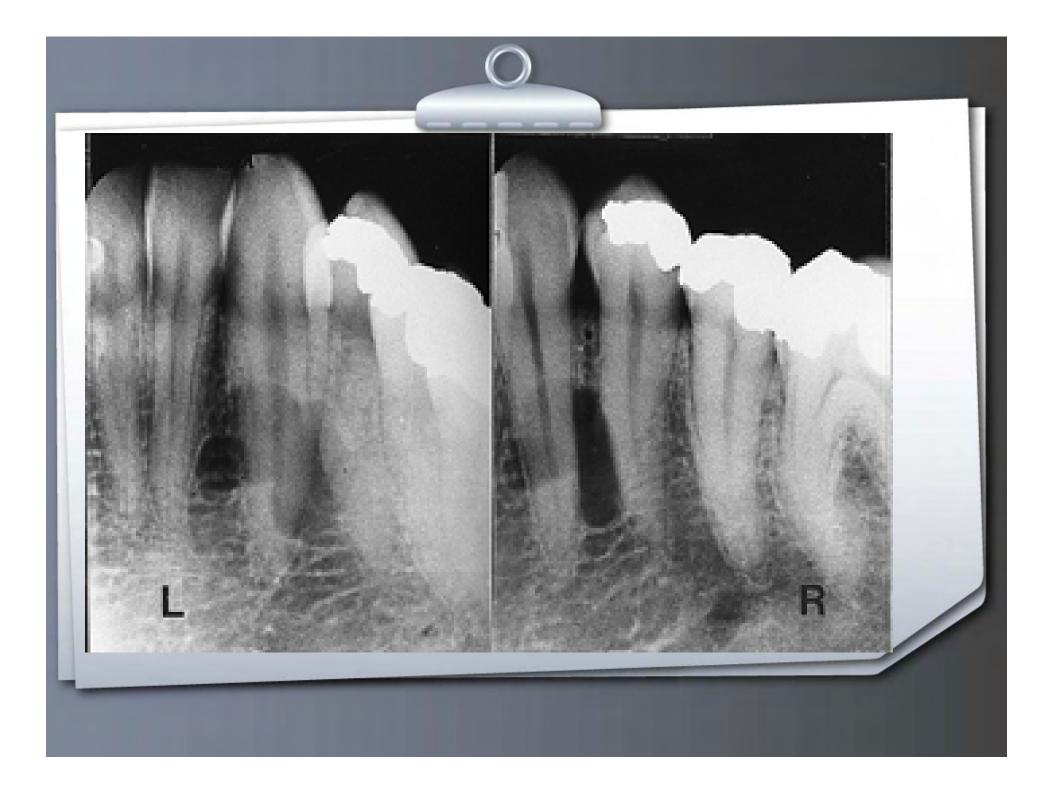
- affect the lamina dura of the adjacent root
- □ botryoid variety→multilocular appearance (seldom appear)
- Large cyst can displace adjacent teeth and cause expansion



Lateral periodontal cyst







our case



lateral periodontal cyst





age 35 y/o 20~90 y/o (mean age is 50) site Lower left buccal region. Mandibular premolar-canine- Lateral root surface of tooth. lateral incisor area. Lateral root surface of tooth. shape dome dome base sessile sessile		Our case	Lateral periodontal cyst
site Lower left buccal region. Mandibular premolar-canine- Lateral root surface of tooth. lateral incisor area. Lateral root surface of tooth. shape dome dome base sessile sessile	gender	male	No sexual predilection
Lateral root surface of tooth.lateral incisor area.Lateral root surface of tooth.Lateral root surface of tooth.shapedomedomebasesessilesessile	age	35 y/o	20~90 y/o (mean age is 50)
Lateral root surface of tooth.shapedomebasesessilesessilesessile	site	Lower left buccal region.	Mandibular premolar-canine-
shapedomebasesessilesessilesessile		Lateral root surface of tooth.	lateral incisor area.
base sessile sessile			Lateral root surface of tooth.
	shape	dome	dome
swelling (+) (+)	base	sessile	sessile
	swelling	(+)	(+)



	Our case	Lateral periodontal cyst
size	1*0.8*0.4 cm ³	< 1cm in diameter
consistency	hard	hard
pain	(-)	(-)
tenderness	(-)	(-)
induration	(-)	(-)
LAP	(-)	(-)

X-ray finding	Our case	Lateral periodontal cyst
Border	well-defined cortical boundary	well-defined cortical boundary
Radiodensity	radiolucency	radiolucency
Effect on surrounding structures/adjacent teeth	Bony hard swelling, but not affect teeth. Discontinued of lamina dura	Small cyst may effect the lamina dura of the adjacent root
Unilocular/ multilocular	Unilocular	Unilocular



From infancy to old ago

about 60% found in 10 ~ 40 y/o

A slight male predilection

□ Small size →usually asymptomatic

Larger size associate with swelling over mucosa

Pain may occur with secondary infection

- Well-defined RL
- smooth and corticated margin in X ray
- Smooth round or oval shape or scalloped outline
- Most in posterior body of the mandible and ramus



Some case has multilocular appearance (because of internal septa)

Propensity to grow along the internal aspect of the jaw

No obvious bone expansion

our case



Odontogenic keratocyst



	Our case	Odontogenic keratocyst
gender	male	A slight male predilection
age	35 y/o	from infancy to old ago
		about 60% found in 10 ~ 40 y/o
site	Lower left buccal region. Lateral root surface of tooth.	Most in posterior body of the mandible and ramus
shape	dome	dome
base	sessile	sessile
swelling	(+)	(+)

	Our case	Odontogenic keratocyst
size	1*0.8*0.4 cm ³	
consistency	hard	Hard
		(perforation→firm fluctance)
pain	(-)	(-)
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, but not affect teeth. Discontinued of lamina dura	No obvious bone expansion. Occasionally expand and perforate the bone
Unilocular/ multilocular	Unilocular	unilocular



(Solid Type)

asymptomatic, large lesion may

cause painless swelling of jaw.

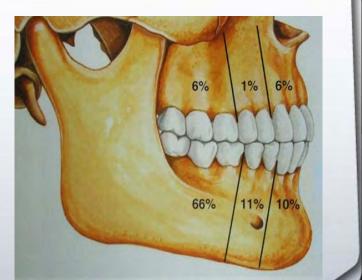
Locally invasive tumor,

slow-growing.

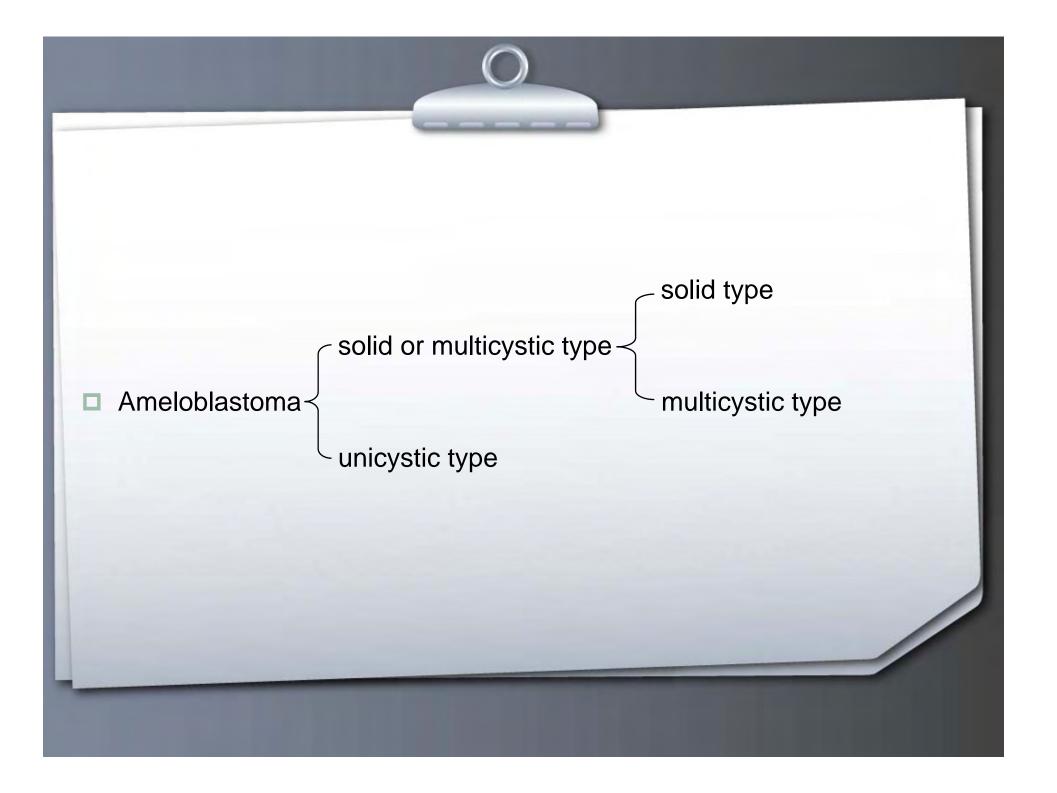
□ No gender predilection.

□ in mandible, posterior region

(molar-ramus region)



- Buccal and lingual cortical expansion.
- Resorption of the roots of teeth.
- Teeth may be displaced and become mobile.
- Radiographic feature
- Usually well-defined and corticated border.
- Vary from unilocular RL to honeycomb or soap bubble pattern (bony septa creating internal compartment)



Solid or multicystic type (rare in younger, 30~80 y/o) 86%

1.multicystic type:

soap bubble

honeycombed





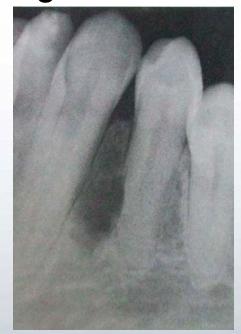
Solid or multicystic type (rare in younger,30~80 y/o) 86%

2.solid type:

It may appear as unilocular RL.

When it grow large, it has scalloping

margin around teeth.



The border may be corticated or not corticated.

Unicystic type : (in young , 20~30 y/o)13%

Often circumscribed RL

around crown of unerupted

mandibular third molar.

Resorption of root is common.



solid type:



our case



Ameloblastoma (solid type)



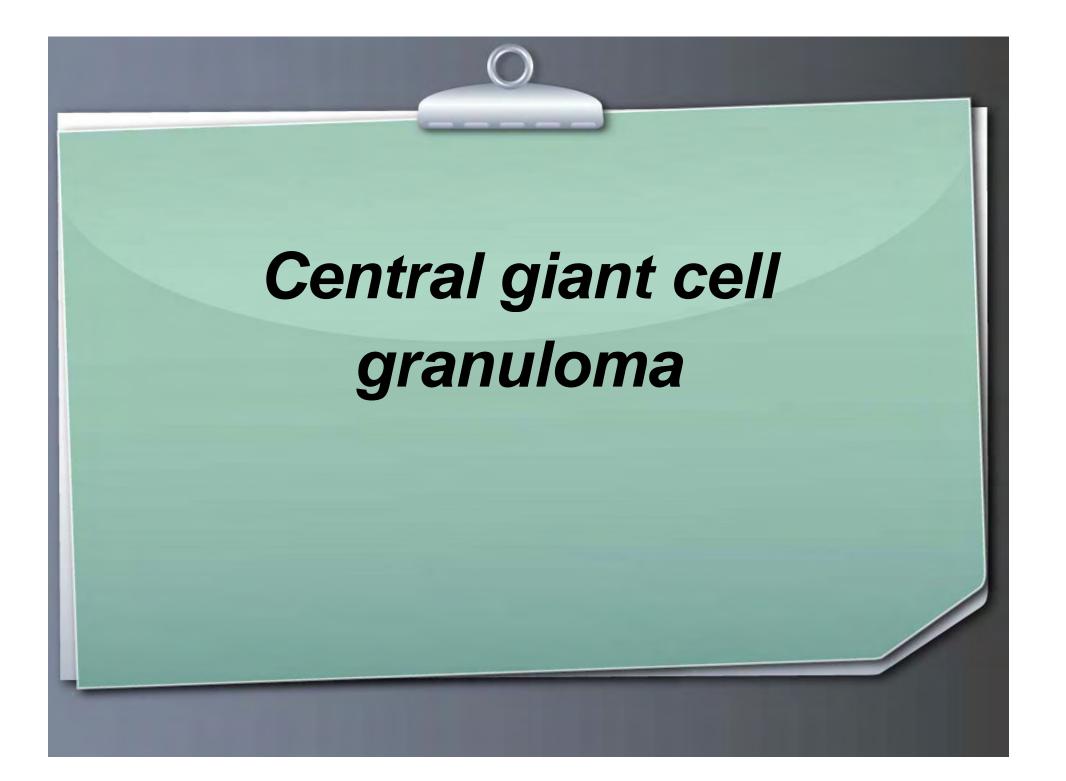
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Our case	Ameloblastoma (solid type)
male	No sexual predilection
35 у/о	rare in younger,30~80 y/o
Lower left buccal region.	in mandible, posterior region
Lateral root surface of tooth.	
dome	
sessile	sessile
(+)	(+)
	35 y/o Lower left buccal region. Lateral root surface of tooth. dome sessile

	Our case	Ameloblastoma (solid type)
size	1*0.8*0.4 cm ³	Wide Range , often large and has scalloping margin around teeth
consistency	hard	hard and bony
pain	(-)	(-)
tenderness	(-)	(-)
induration	(-)	(-)
LAP	(-)	(-)



X-ray finding	Our case	Ameloblastoma (solid)
Border	well-defined cortical boundary	Not definitely Cortical boundary
Radiodensity	radiolucency	radiolucency
Effect on surrounding structures/adjacent teeth	Bony hard swelling, but not affect teeth. Discontinued of lamina dura.	Buccal and lingual cortical expansion.
Unilocular/ multilocular	Unilocular	unilocular
mannocular		



□ From 2-80 y/o (60% occur before age 30)

□ 70% in mandible (Common in anterior jaws)

Mandibular lesions frequently cross the midline

Most are asymptomatic.

Minor are with pain, paresthesia, ulceration

□ RL

- Unilocular or multilocular
- Well delineated
- non cortical margin
- □ From 5 mm to 10 cm in size
- no internal structure

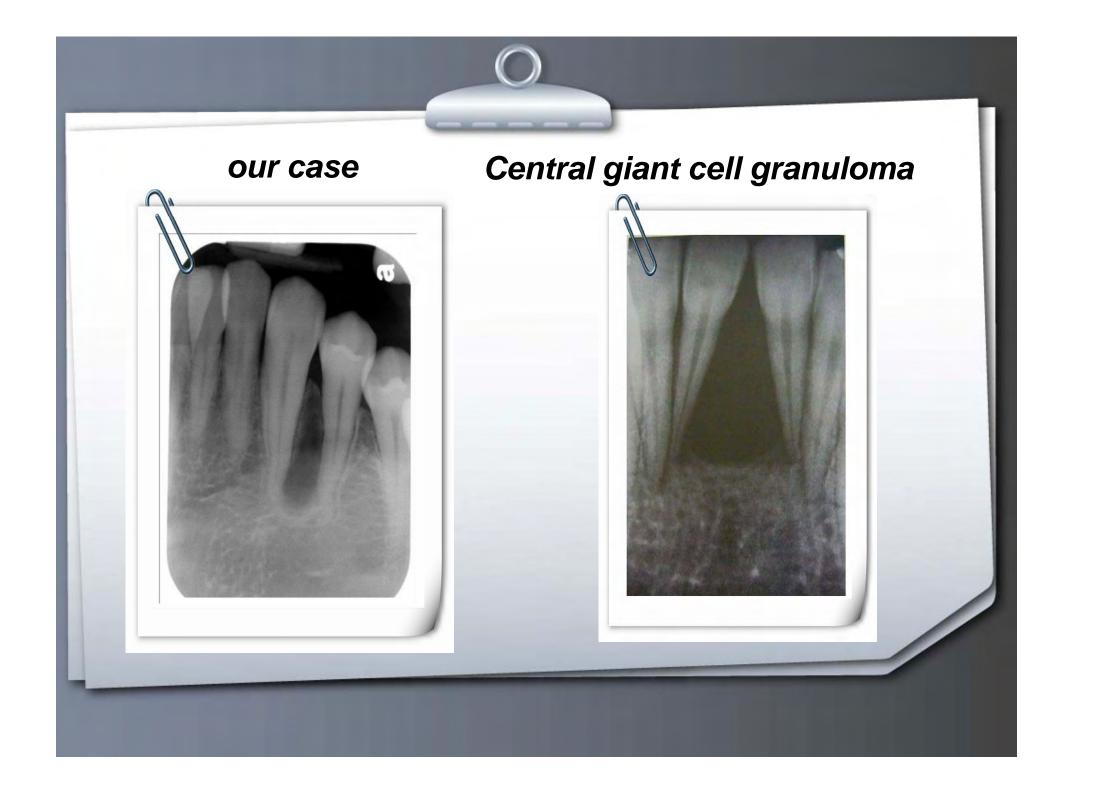


Nonaggressive lesions:

- Most cases
- Few or no symptoms
- Slow growth
- No cortical perforation or root resorption

Aggressive lesions:

- Pain, rapid growth, cortical perforation, root resorption
 - Recur after treatment





	Our case	Central giant cell granuloma
gender	male	Non predilection
age	35 y/o	60% before 30 y/o (from 2-80)
site	lower left buccal region	mandibular anterior portion area
	Lateral root surface of tooth	
shape	dome	dome
base	sessile	sessile
swelling	(+)	(+)



	Our case	Central giant cell granuloma
size	1*0.8*0.4 cm ³	From 5 mm to 10 cm
consistency	hard	hard
pain	(-)	Most (-)
tenderness	(-)	(-)
induration	(-)	(-)
LAP	(-)	(-)

X-ray finding	Our case	Central giant cell granuloma
Border	well-defined cortical boundary	well-defined no cortical boundary
Radiodensity	radiolucency	radiolucency
Effect on surrounding structures/adjacent teeth	Bony hard swelling, but not affect teeth Discontinued of lamina dura.	Bony hard swelling, seldom affect teeth
Unilocular/	Unilocular	Unilocular or multilocular
multilocular		



Clinical features

- Benign neural neoplasm of Schwann cell origin.
- □ Slow growing, swelling, encapsulated.
- □ As it grow, it pushes the nerve aside.
- Asymptomatic, tenderness or pain may occur in some instance.
- Young and middle age adults
- Size can range from few millimeters to centimeters.

Tongue is most common location

- Arises centrally within bone and may produce bony expansion.
- □ Intraosseous are most common in posterior mandible.
- Pain and paresthesia are not usual for intrabony tumor.
- Commonly originated within inferior alveolar nerve.

Radiographic Features

Well-defined unilocular or multilocular RL.

Small lesions are cystic like





	0	
	Our case	Neurilemmoma
		(central type)
gender	male	No sexual predilection
age	35 y/o	Young and middle age adults (20~30y/o)
site	lower left buccal region	posterior mandible
shape	dome	nodular
base	sessile	sessile
swelling	(+)	(+)

	0	
	Our case	Neurilemmoma
		(central type)
size	1*0.8*0.4 cm ³	Size range from few mm to cm
consistency	hard	hard
pain	(-)	(-)
tenderness	(-)	(-)
induration	(-)	(-)
LAP	(-)	(-)

	0	
X-ray finding	Our case	Neurilemmoma
		(central type)
Border	well-defined cortical boundary	well-defined cortical boundary
Radiodensity	radiolucency	radiolucency
Effect on surrounding structures/adjacent teeth	Bony hard swelling, but not affect teeth	Cause root resorption Expansion of inferior alveolar canal
Unilocular/ multilocular	Unilocular	Unilocular/multilocular

Central Ossifying fibroma

(Early stage)

Clinical feature

- □ A wide age range, 30-40 years old is most common
- Female predilection
- Mandibular premolar and molar area is the most common site > maxilla
- Small lesion seldom cause any symptoms
- Larger tumors result in a painless swelling of the involved bone
- Pain and paresthesia are rarely associated

Radiographic feature

- Well defined and unilocular
- Some show a sclerotic border
- vary degrees of RO with calcified material
- Root divergency
- Root resorption
- Large size will grow downward inferior cortex of the mandible

Central Ossifying fibroma





 Most of this pattern is RL with a few wispy trabeculae (arrow)

 A fibrous dysplasia granular-like pattern (arrow)





	Our case	Central ossifying fibroma
gender	male	Female
age	35 y/o	30-40 y/o (A wide age range)
site	lower left buccal region Lateral root surface of tooth	mandibular premolar and molar area
shape	dome	dome
base	sessile	sessile
swelling	(+)	(+)

\bigcirc	

	Our case	Central ossifying fibroma
size	1*0.8*0.4 cm ³	Small -large
consistency	hard	hard
pain	(-)	(-)
tenderness	(-)	(-)
induration	(-)	(-)
LAP	(-)	(-)



X-ray finding	Our case	Central ossifying fibroma
Border	well-defined cortical boundary	well-defined cortical boundary
Radiodensity	radiolucency	radiolucency
Effect on surrounding structures/adjacent teeth	Bony hard swelling, but not affect teeth. Discontinued of lamina dura.	Root divergence, Root resorption
Unilocular/ multilocular	Unilocular	Unilocular

Clinical Impression

Odontogenic developmental cyst

Lateral periodontal cyst

Benign intrabony tumor

Ameloblastoma (solid type)

