

# 口腔診斷學 SEMINAR

## 第4組

指導老師： 王文岑醫師  
陳玉昆醫師

# 組員名單

組長：吳健恒

組員：吳承光    陳威齊    陳覺斌

陳梅信    吳詠霞    葉彥宏

林曉怡    高秉宏    洪裕盛

# HISTORY AND EXAMINATION

# GENERAL DATA

- Name: OOO
- Chart no.: Case 4
- Sex: Female
- Age: 60 y/o
- Marital status: Marriage
- Occupation: Housewife

# CHIEF COMPLAINT

- A lesion over lower left jaw and pain over upper left posterior teeth.

## PRESENT ILLNESS

- This 60 y/o female suffered from sharp pain over teeth 27 long time ago and she also felt pain when touching lower left teeth. She went to a LDC for treatment last week. After radiographic exam, the dentist found a lesion over lower left mandible. Then she was referred to our OPD for further evaluation and treatment.

# EXTRAORAL EXAMINATION

- Profile: convex
- Facial asymmetry
- Lymphadenopathy: (-)



# INTRAORAL EXAMINATION

- Pain,hard swelling over lower anterior
- Base: sessile
- Shape: dome
- Color: red
- Mobility: fixed
- Fluctuation: (-)
- Tenderness: (-)
- Induration: (-)
- Lymphadenopathy: (-)

# INTRAORAL EXAMINATION

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- Improper long span crown & bridge at maxilla:16~27
- C&B and cantilever:33~36
- C&B:42,43,44
- Missing:12,13,16,17,18,12,25,26,28,35,36,37,38,45,46, 47,48
- Post&core:11,21
- Sharp pain,gingival swelling at tooth 27
- Percussion pain at tooth 27,33,34,42,43, 44
- Plaque and calculus deposition

# PAST MEDICAL HISTORY

- Systemic disease history: Thyromegaly (cured)
- Allergic reaction: Unknown drug(感冒藥)
- Hospitalized history: Thyroidectomy
- Current medicine: Denied

# PAST DENTAL HISTORY

- Post and core
- Prosthesis fabrication
  - crown and bridge
  - cantilever

# PERSONAL HABIT

Risk factors related to malignancy:

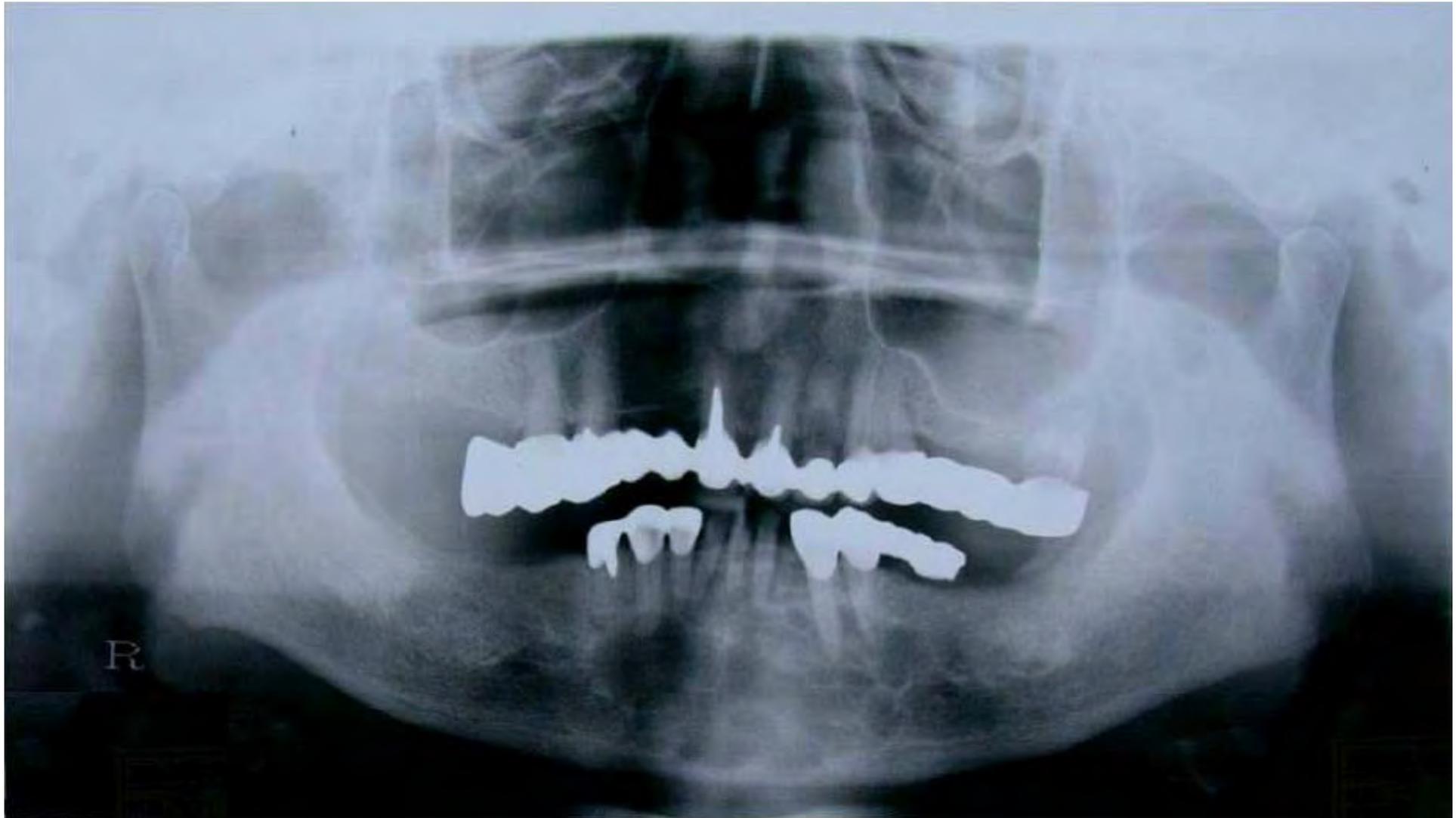
- Alcohol drinking: (-)
- Betel-quid chewing: (-)
- Cigarette smoking: (-)

Others:

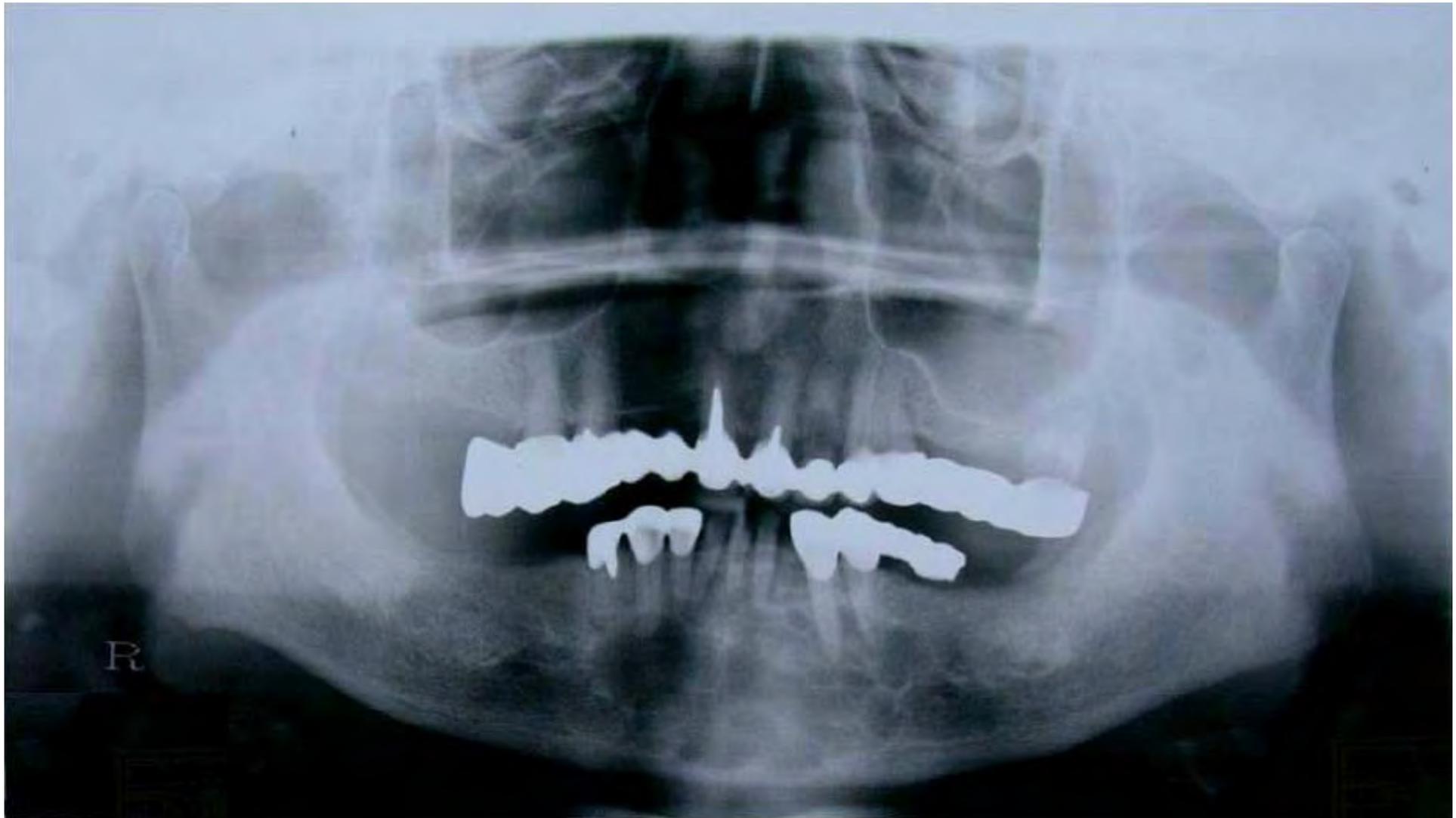
- Denied other specific oral habits

# RADIOGRAPH - PANO





- There is a ill-defined multilocular irregular shaped radiolucency with non-corticated margin extending from mesial aspect of tooth 43 to left mandible body, measuring approximately 3 x 9 cm in diameter, cortical destruction of lower border can also be found.



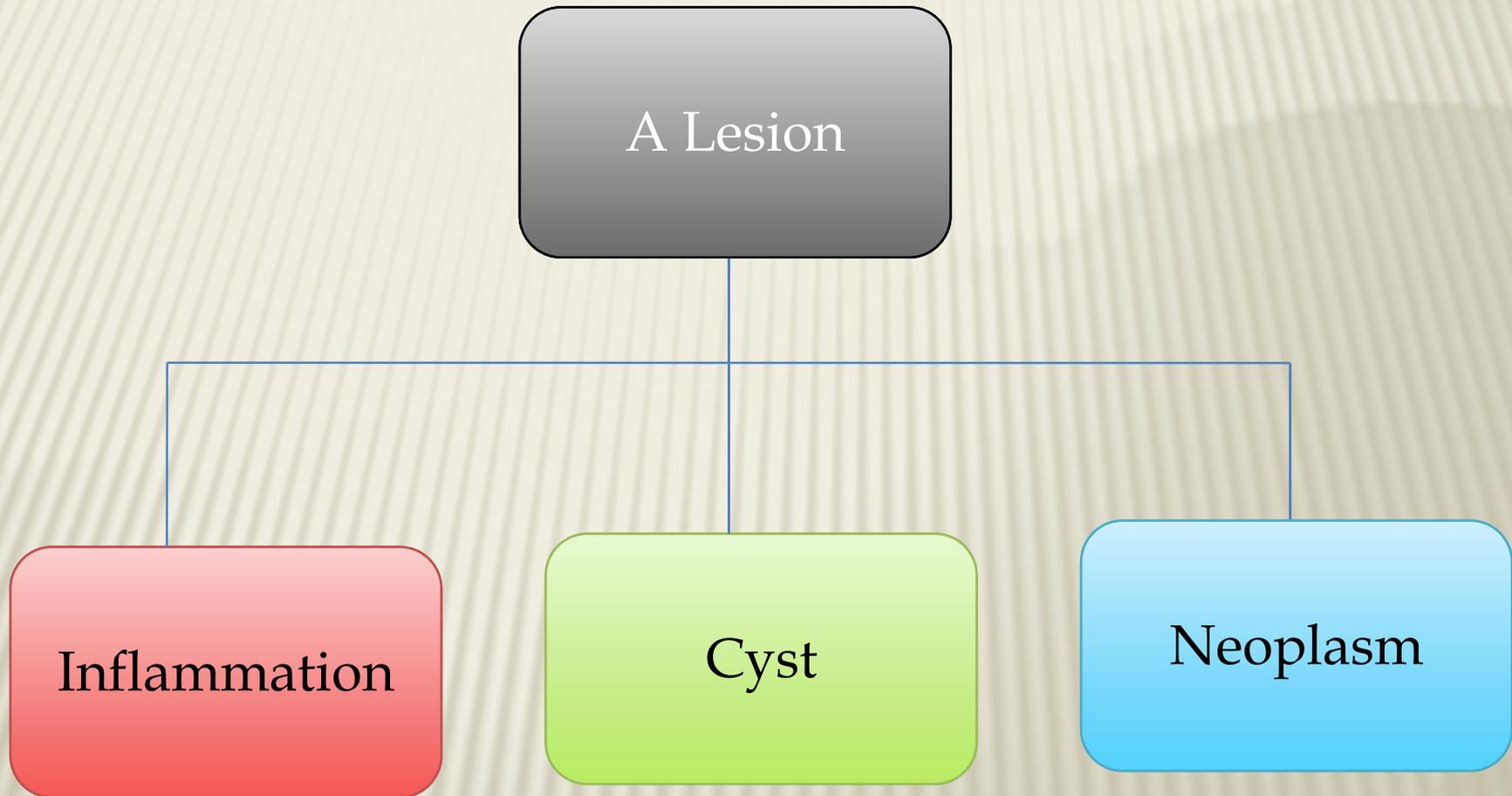
- Left maxillary sinus: enlargement
- Secondary caries: tooth 27
- Internal resorption: tooth 22
- Tooth attrition: tooth 31,32,41
- Periapical pathology: tooth 43

# **DIAGNOSIS**

**CLASSIFICATION OF LESION  
POSSIBLE DIAGNOSIS  
DIFFERENTIAL DIAGNOSIS  
CLINICAL IMPRESSION**

# CLASSIFICATION OF LESION

# GENERAL CLASSIFICATION



# Inflammation

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In our case:

Color: red

**Fever or local heat (-)**

Pain (+)

Swelling(+) => bony hard swelling

Purulent drainage (-)

Caries (-)



Cyst

Neoplasm

A Lesion

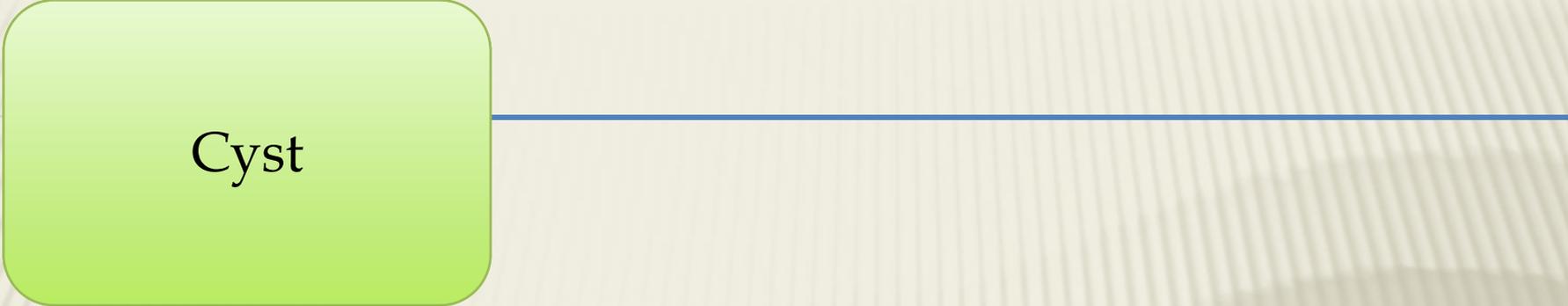
Inflammation

Cyst

Neoplasm



Cyst



In our case:

Color: red

**Fever or local heat (-)**

Pain (+)

Swelling(+) => bony hard swelling

Purulent drainage (-)

Caries (-)



Cyst



Neoplasm



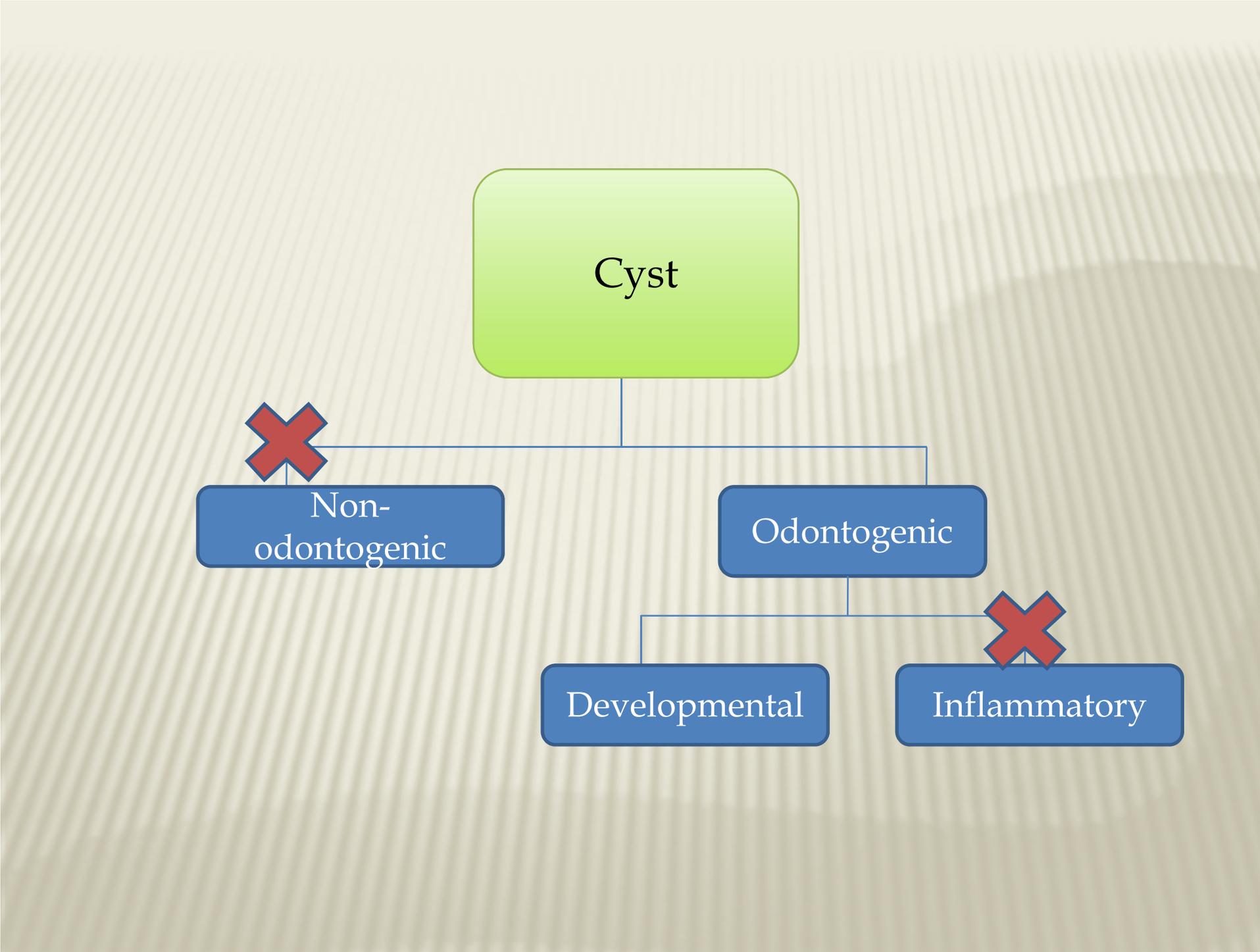
Cyst

  
Non-odontogenic

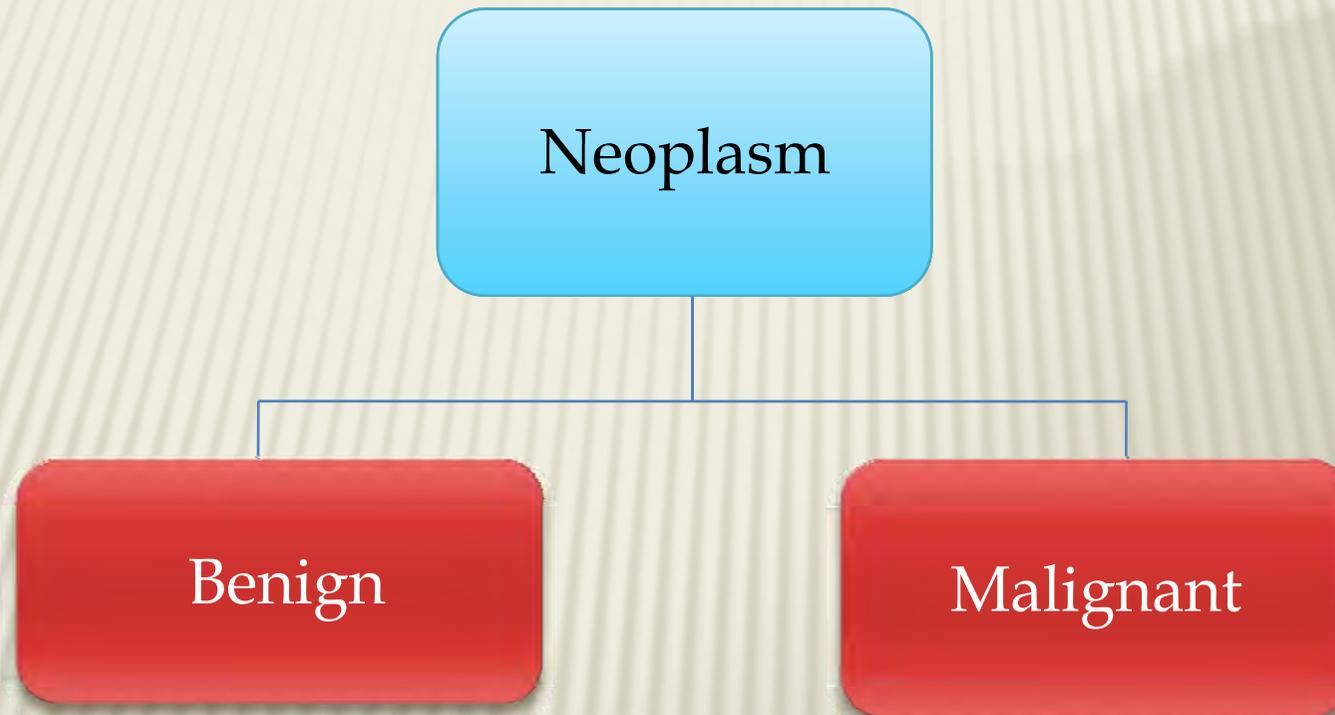
Odontogenic

Developmental

  
Inflammatory



# NEOPLASM BENIGN OR MALIGNANT?



## Neoplasm

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Pain (+)

Tenderness (-)

Lymphadenopathy (-)

Ulceration (-)

Induration (-)

Numbness (-)

Smooth surface

Slow growth

Well-defined radiolucency



Benign

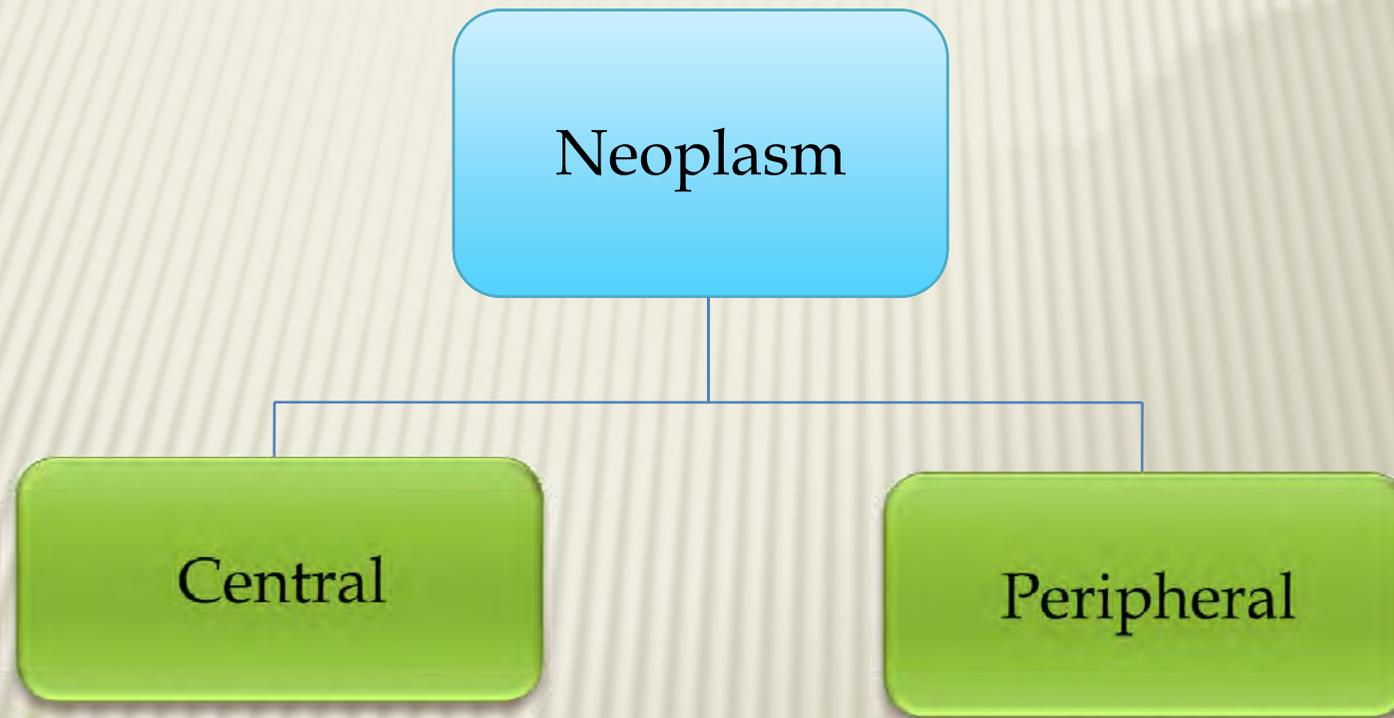
Neoplasm



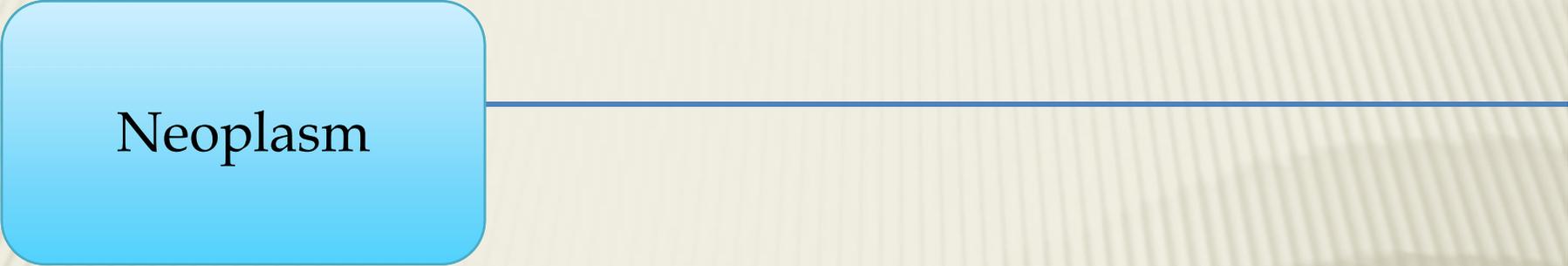
Benign

Malignant  
Or  
Benign aggressive

# NEOPLASM CENTRAL OR PERIPHERAL?



Neoplasm



Induration (-)

**Consistency: hard**

**Bone destruction (+)**



Central



Neoplasm

Central

Peripheral



# Classification of lesion

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Odontogenic Cyst

or

Central Type Malignant (or  
beginning aggressive) Tumor

# Possible diagnosis

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## Neoplasm

1. Ameloblastic carcinoma
2. Odontogenic myxoma

## Cyst

1. Glandular odontogenic cyst

## Others

1. Central giant cell lesion
2. Hemangioma
3. Malignant neurolemmoma

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# DEFERENTIAL DIAGNOSIS

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# **1. AMELOBLASTIC CARCINOMA**

# AMELOBLASTIC CARCINOMA (CLINICAL)

	Our case	Ameloblastic carcinoma
<b>Gender</b>	Female	No sexual predilection
<b>Age</b>	60	4~75 y/o (mean age,30years)
<b>Symptom</b>	Pain occurs when touching lower left teeth	Asymptomatic, a painless swelling or expansion of the jaw
<b>Site</b>	Left mandibular body to the symphysis (cross the midline)	85%→mandible, most often in the molar-ascending ramus area 15%→maxilla
<b>Color</b>	Red	Red
<b>Shape</b>	Dome	Dome sessile

# AMELOBLASTIC CARCINOMA(CLINICAL) (CONT.)

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	<b>Our Case</b>	<b>Ameloblastic Carcinoma</b>
<b>Tenderness</b>	-	Painless
<b>Pain</b>	+	+
<b>LAP</b>	-	Cervical lymph nodes
<b>Consistency</b>	Hard	Hard
<b>Frequency</b>	Unknown	In Blacks or no predilection

# AMELOBLASTIC CARCINOMA(X RAY FINDING)

	<b>Our case</b>	<b>Ameloblastic Carcinoma</b>
<b>Border</b>	Ill-defined margins	Ill-defined margins
<b>Radiodensity</b>	Radiolucency	Radiolucency
<b>Effect on surrounding structures/adjacent teeth</b>	Bony hard swelling, Teeth pain when touching	Metastases to lungs and cervical lymph nodes are the most common.  Solid, bony hard swelling, cortical destruction
<b>Unilocular/multilocular</b>	Multilocular	Multilocular

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# **2. ODONTOGENIC MYXOMA**

# ODONTOGENIC MYXOMA

	Our case	Odontogenic myxoma
Gender	Female	No sexual predilection
Age	Unknown	Occur over a wide age group (average age,25~30years)
Symptom	Pain occurs when touching lower left teeth	Smaller : asymptomatic and are discovered only during a radiographic examination. Larger : often associated with a painless expansion of the involved bone
Site	Left mandibular body to the symphysis (cross the midline)	見下圖
Shape	Dome	Dome
size	3.0*9.0 cm	No usual size

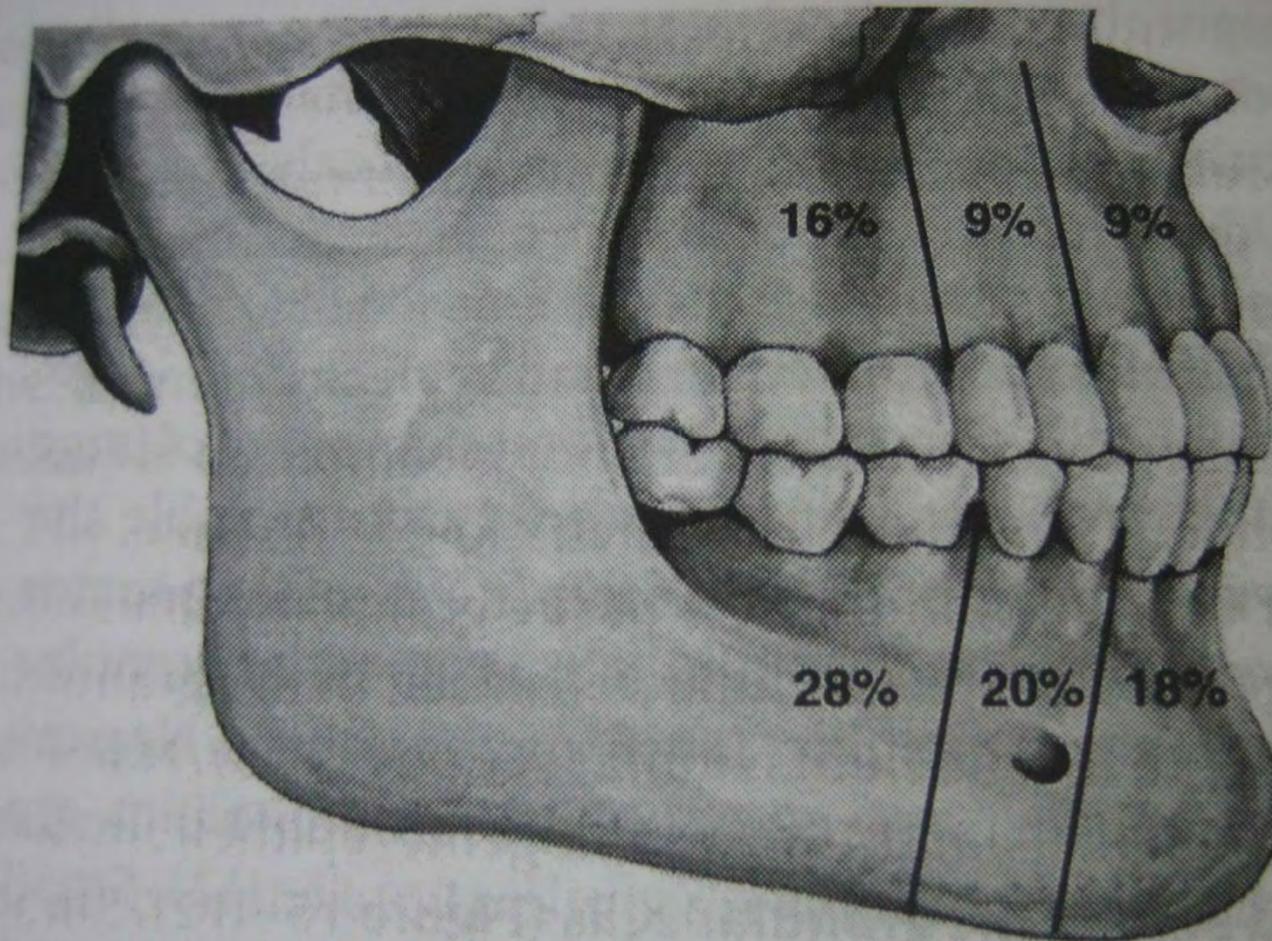


Figure 15-113 ♦ **Odontogenic myxoma.** Relative distribution of odontogenic myxoma in the jaws.

# AMELOBLASTIC CARCINOMA(CONT.)

Tenderness	-	Painless
LAP	-	-
Border	Ill-defined margins	Ill-defined irregular or scalloped margins
Radiodensity	Radiolucency	Radiolucency
Effect on surrounding structures/adjacent teeth	Bony hard swelling, Teeth pain when touching	May displace or cause resorption of teeth in the area of the tumor.
Unilocular/multilocular	Multilocular	Unilocular or multilocular(soap bubble)

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# **3. GLANDULAR ODONTOGENIC CYST**

# GLANDULAR ODONTOGENIC CYST

	<b>Our Case</b>	<b>Glandular Odontogenic Cyst</b>
<b>Age</b>	60 y/o	Middle-aged adult, mean age 49 , rarely occure on age <20
<b>Site</b>	Left mandibular body to the symphysis (cross the midline)	Mandible , anterior region, always cross midline
<b>Swelling</b>	(+)	Clinical expansion
<b>Size</b>	3.0 x 9.0 cm	Samll to large
<b>Pain</b>	(+)	Sometimes
<b>Symptom</b>	Swelling, pain when touching on mandible	Small lesion: asymptom Large lesion: swelling, pain or paresthesia

# GLANDULAR ODONTOGENIC CYST (X-RAY)

	<b>Our Case</b>	<b>Glandular Odontogenic Cyst</b>
<b>Border</b>	Ill defined with non-corticated	Well defined with a sclerotic rim
<b>Radiodensity</b>	Radiolucency	Radiolucency
<b>Unilocular/multilocular</b>	Multilocular	Multilocular

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# 4. CENTRAL GIANT CELL LESION

# CENTRAL GIANT CELL LESION

	<b>Our Case</b>	<b>Central Giant Cell Lesion</b>
<b>Gender</b>	F	F>M
<b>Age</b>	60	30-70 (60%< 30yrs)
<b>Site</b>	Left mandibular body to the symphysis (cross the midline)	Mandible frequently cross midline
<b>Color</b>	Red	Predominant red
<b>Pain</b>	(+)	Mostly asymptomatic, minority: pain, paresthesia
<b>Size</b>	3.0 x 9.0cm	Small: 5x5mm to Large: 10cm
<b>Swelling</b>	(+)	(+)
<b>Base</b>	Sessile	Sessile
<b>Shape</b>	Dome	Dome (similar to pyogenic granuloma)
<b>Surface</b>	Smooth	Smooth

# CENTRAL GIANT CELL LESION (X-RAY)

	<b>Our Case</b>	<b>Central giant cell lesion</b>
<b>Border</b>	Ill-defined	Well-defined
<b>Radio density</b>	Soap bubble	Soap bubble
<b>Unilocular / multilocular</b>	Multilocular	Multilocular or unilocular

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# 5. HEMANGIOMA

# HEMANGIOMA- INTRABONY VASCULAR MALFORMATIONS

	Our case	hemangioma
<b>Gender</b>	Female	Female
<b>Age</b>	60	Most between 10 and 20 years of age
<b>Frequency</b>		
<b>Symptom</b>	Pain occurs when touching lower left teeth	Asymptomatic Some with pain or swelling Mobility of teeth or bleeding from gingival sulcus A Bruit or pulsation may be apparent on auscultation and palpation
<b>Site</b>	Left mandibular body to the symphysis (cross the midline)	Mandible : maxilla=2:1
<b>Size</b>	3.0*9.0 cm	

# AMELOBLASTOMA(CONT.)

	<b>Our Case</b>	<b>Ameloblastoma</b>
<b>Tenderness</b>	-	
<b>X-ray finding</b>	Multilocular radiolucent	Most Multilocular radiolucent Honeycomb or soap bubble appearance
<b>Border</b>	Ill-defined margins	Well or ill-defined margins
<b>Radiodensity</b>	Radiolucency	Radiolucency
<b>Effect on surrounding structures/adjacent teeth</b>	Bony hard swelling, Teeth pain when touching	Large-cortical expansion
<b>Unilocular/multilocular</b>	Multilocular	multilocular

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# **6. CENTRAL NEUROLEMMOMA**

# CENTRAL NEUROFIBROMA

	<b>Our case</b>	<b>Malignant neurolemmoma</b>
<b>Age</b>	60	Young and middle age
<b>Symptom</b>	Pain occurs when touching lower left teeth	May produce bony expansion, Pain or paresthesia are not unusual
<b>Site</b>	Left mandibular body to the symphysis (cross the midline)	When within bone, most common in the posterior mandible
<b>Radiograph</b>	Ill-defined multilocular	Unilocular or multilocular



# CLINICAL IMPRESSION

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1. Odontogenic myxoma
2. Central giant cell granuloma

**THANK YOU FOR YOUR  
ATTENTION**

# 補充資料

AMELOBLASTOMA  
ODONTOGENIC CYST  
RADICULAR CYST  
CHRONIC OSTEOMYEOLITIS

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# 1. AMELOBLASTOMA

# AMELOBLASTOMA

	Our case	Ameloblastoma
<b>Gender</b>	Female	No sexual predilection
<b>Age</b>	60	20~70 y/o Rare younger than 20y/o
<b>Frequency</b>		In Blacks or no predilection
<b>Symptom</b>	Pain occurs when touching lower left teeth	Asymptomatic, a painless swelling or expansion of the jaw
<b>Site</b>	Left mandibular body to the symphysis (cross the midline)	85%→mandible, most often in the molar-ascending ramus area 15%→maxilla
<b>Size</b>	3.0*9.0 cm	No usual size

# AMELOBLASTOMA(CONT.)

	<b>Our Case</b>	<b>Ameloblastoma</b>
<b>X-ray finding</b>	Multilocular radiolucent	Multilocular radiolucent
<b>Border</b>	Ill-defined margins	<b>Well-defined margins</b>
<b>Radiodensity</b>	Radiolucency	Radiolucency
<b>Effect on surrounding structures/adjacent teeth</b>	Bony hard swelling, Teeth pain when touching	Buccal and lingual cortical expansion is frequently. <b>Resorption of roots of teeth</b> adjacent to the tumor
<b>Unilocular/multilocular</b>	Multilocular	Multilocular

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## **2. ODONTOGENIC KERATOCYST**

# ODONTOGENIC KERATOCYST

	<b>Our Case</b>	<b>Odontogenic Keratocyst</b>
<b>Gender</b>	Female	Male predilection (slightly)
<b>Age</b>	60 y/o	From infancy to older 10-60 y/o, about 60%
<b>Site</b>	Left mandibular body to the symphysis (cross the midline)	Most in posterior body of the mandible and ramus
<b>Shape</b>	Dome	Dome
<b>Base</b>	Sessile	Sessile
<b>Swelling</b>	+ (Tooth 27 and lower left gingival swelling)	+

# ODONTOGENIC KERATOCYST

<b>Consistency</b>	Hard	Hard
<b>Pain</b>	+	+ (large in size) - (small in size)
<b>Tenderness</b>	-	-
<b>Induration</b>	-	-
<b>Lymphadenopathy(LAP)</b>	-	-

# ODONTOGENIC KERATOCYST

<b>X-ray findings</b>	<b>Our Case</b>	<b>Odontogenic Keratocyst</b>
<b>Border</b>	Ill-defined with no corticated margin	Well-defined corticated boundary
<b>Radiodensity</b>	Radiolucency	Radiolucency
<b>Effect on surrounding structure/ adjacent tooth</b>	No obvious bone expansion Facial asymmetry	No obvious bone expansion Jaw asymmetry
<b>Unilocular/multilocular</b>	Multilocular	Unilocular/multilocular

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# 3.RADICULAR CYST

# Radicular Cyst

	<b>Our Case</b>	<b>Radicular Cyst</b>
<b>Pain</b>	+	No symptoms unless it becomes infected, the tooth and swelling develop all the painful symptoms of an abscess
<b>Swelling</b>	+	Small(>1.6cm would be suggestive) to large(complete quadrant)
<b>Radiographic size</b>	3.0 x 9.0 cm	Cannot be used for the definitive diagnosis
<b>Site</b>	Cross midline	Complete quadrant
<b>Shape</b>	Dome	Dome
<b>Consistency</b>	Hard	It is bony hard to palpation, but later it may demonstrate a crackling sound as the cortical plate becomes thinned

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# 4. CHRONIC OSTEOMYELITIS

# CHRONIC OSTEOMYELITIS

	<b>Our case</b>	<b>Chronic osteomyelitis</b>
<b>Gender</b>	Female	Male(75%)
<b>Age</b>	60	All age (uncommon for under 30)
<b>Symptom</b>	Pain occurs when touching lower left teeth	Swelling, pain
<b>Site</b>	Left mandibular body to the symphysis (cross the midline)	mandible

# CHRONIC OSTEOMYELITIS (X-RAY)

<b>X-ray finding</b>	<b>Our case</b>	<b>Chronic Osteomyelitis</b>
<b>Border</b>	Ill-defined margins	Patchy, ragged, ill-defined contains central radiopaque sequestra
<b>Radiodensity</b>	Radiolucency	Radiolucency
<b>Effect on surrounding structures/adjacent teeth</b>	Bony hard swelling, Teeth pain when touching	