



Intern A:

游杰洺、蔡豐光、張儒豐、郭懿霆

指導醫師：口腔病理科全體醫師

2011/09/26

# CASE REPORT

# CHIEF COMPLAINT

---

× 100. 4.7

+ Recurrent tumor over right coronoid process for about 2 years.

# PERSONAL DATA

---

- Name : 韓XX
- No. of Chart : 1XXXXXX8
- Gender : Female
- Age : 33 y/o
- Marital status : 已婚
- Address : 高雄市三民區
- Date of first visit : 91/5/28

# PHYSICAL EXAMINATION

- ✘ Surface : Smooth
- ✘ Pain : (-)
- ✘ Tenderness : (-)
- ✘ Right chin numbness,  
due to previous OP
- ✘ No effect on facial  
profile



# PRESENT ILLNESS

---

## × 91.5.28

- + Swelling over right posterior mandible for 2 month.
- + O.E.: 2x2cm, smooth, firm, fixed, painless, tenderness(-)
- + Refer from 長庚H for biopsy and further treatment.
- + Panoramic findings: large radiolucency shadow over right posterior mandible extended into ramus (near sigmoid notch)
- + Incision biopsy was done, H-P result: Unicystic Ameloblastoma, desmoplastic, right mandible
- + Aspiration: (+) yellowish fluid
- + C-T image findings: compatible with ameloblastoma at right mandibular angle

✘ 91.6.18~91.9

- + Decompression with Penrose drain, N/S irrigation
- + O.P. on 91.10.4 : excision + bone trimming

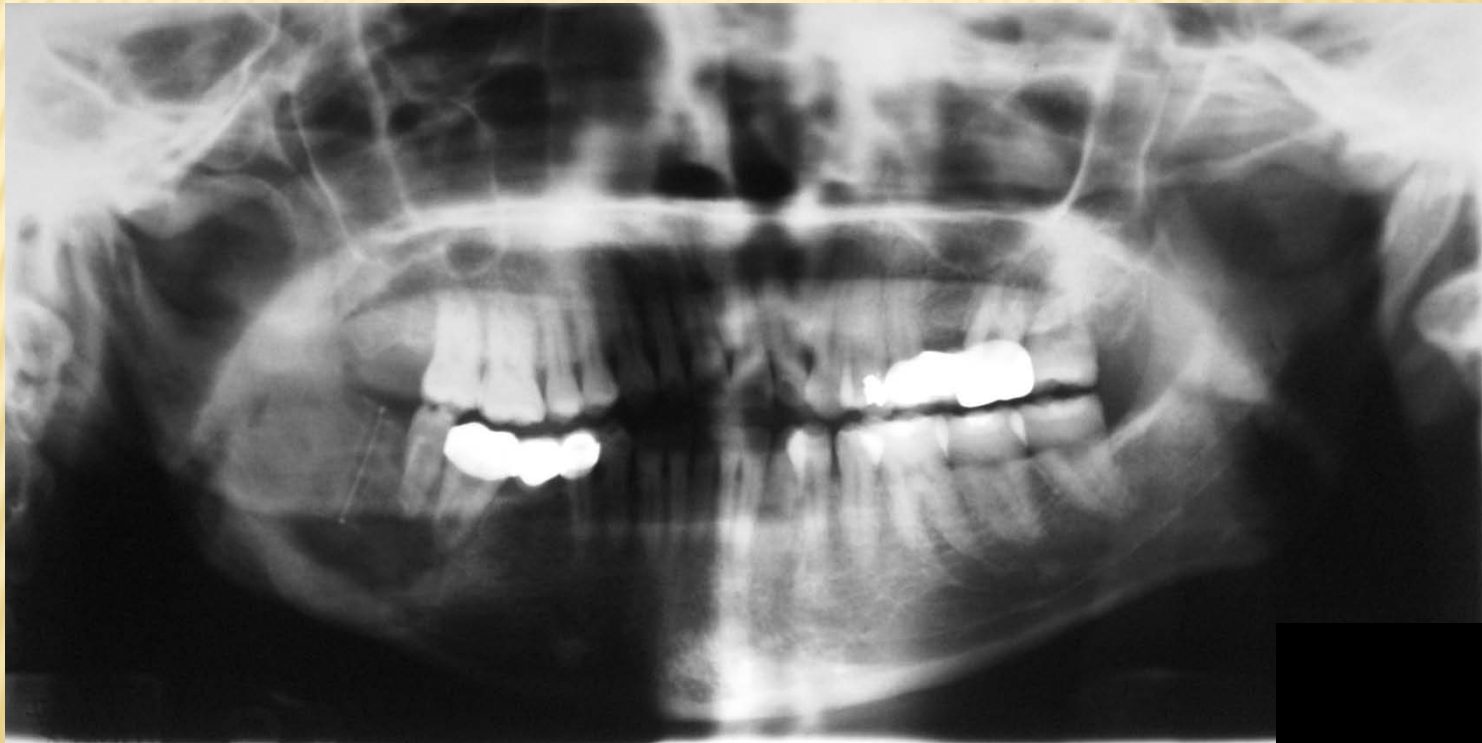
91.8.7



✘ 91.6.18~91.9

- + Decompression with Penrose drain, N/S irrigation
- + O.P. on 91.10.4 : excision + bone trimming

91.9.4



- 91.6.18~91.9
  - Decompression with Penrose drain, N/S irrigation
  - O.P. on 91.10.4 : excision + bone trimming

91.11.6





- 92.7.9~94.5.2
  - Regular follow up , panoremic film: stationary

92.4.2



## 95.6.7

Panoramic film show: radiolucent lesion over right mandibular body and angle again.

96.4.20

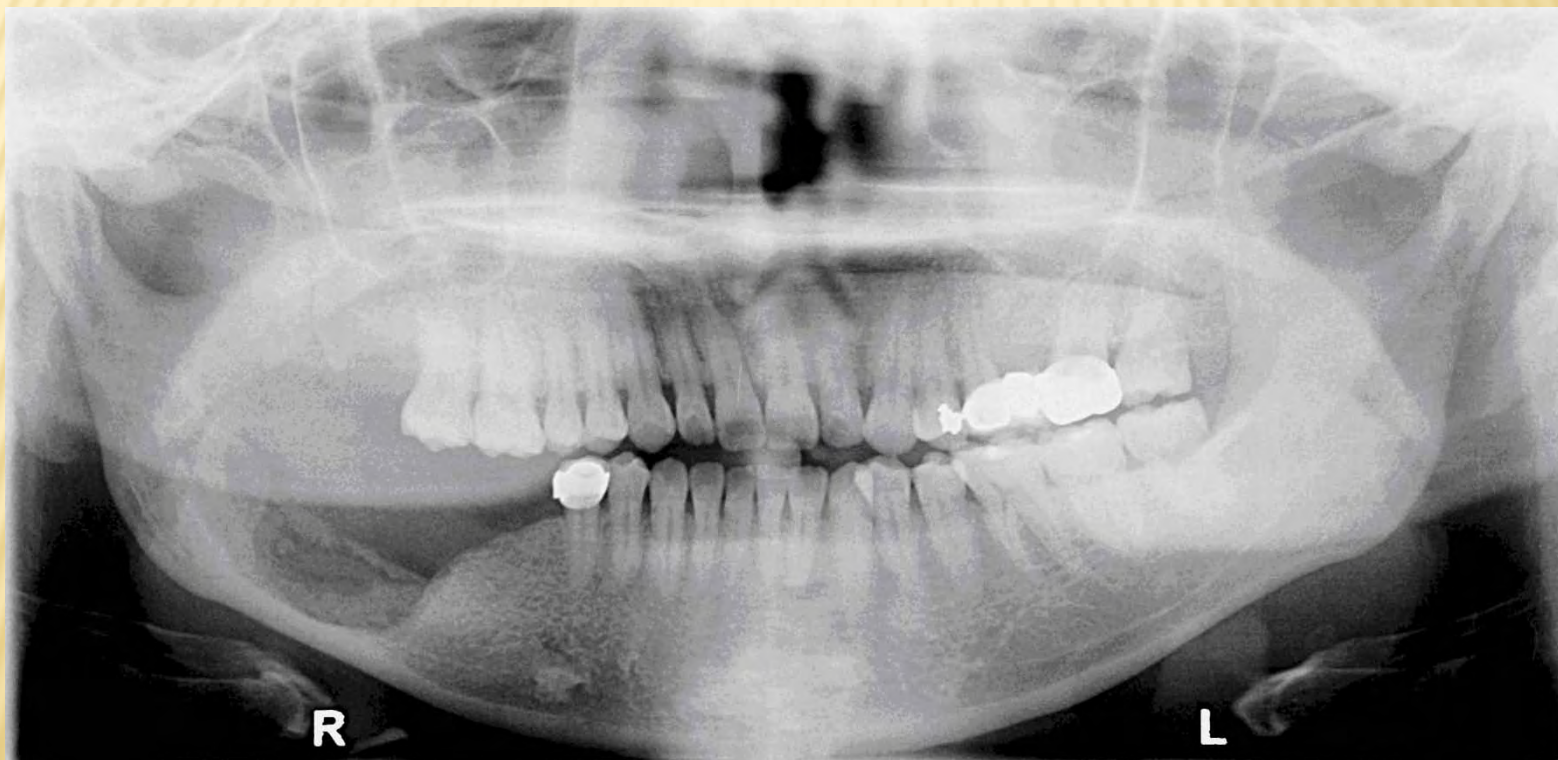
Incision biopsy, H-P result: ameloblastoma, right mandibular  
OP on 96.5.16 : excision + Bone trimming

96.4.20



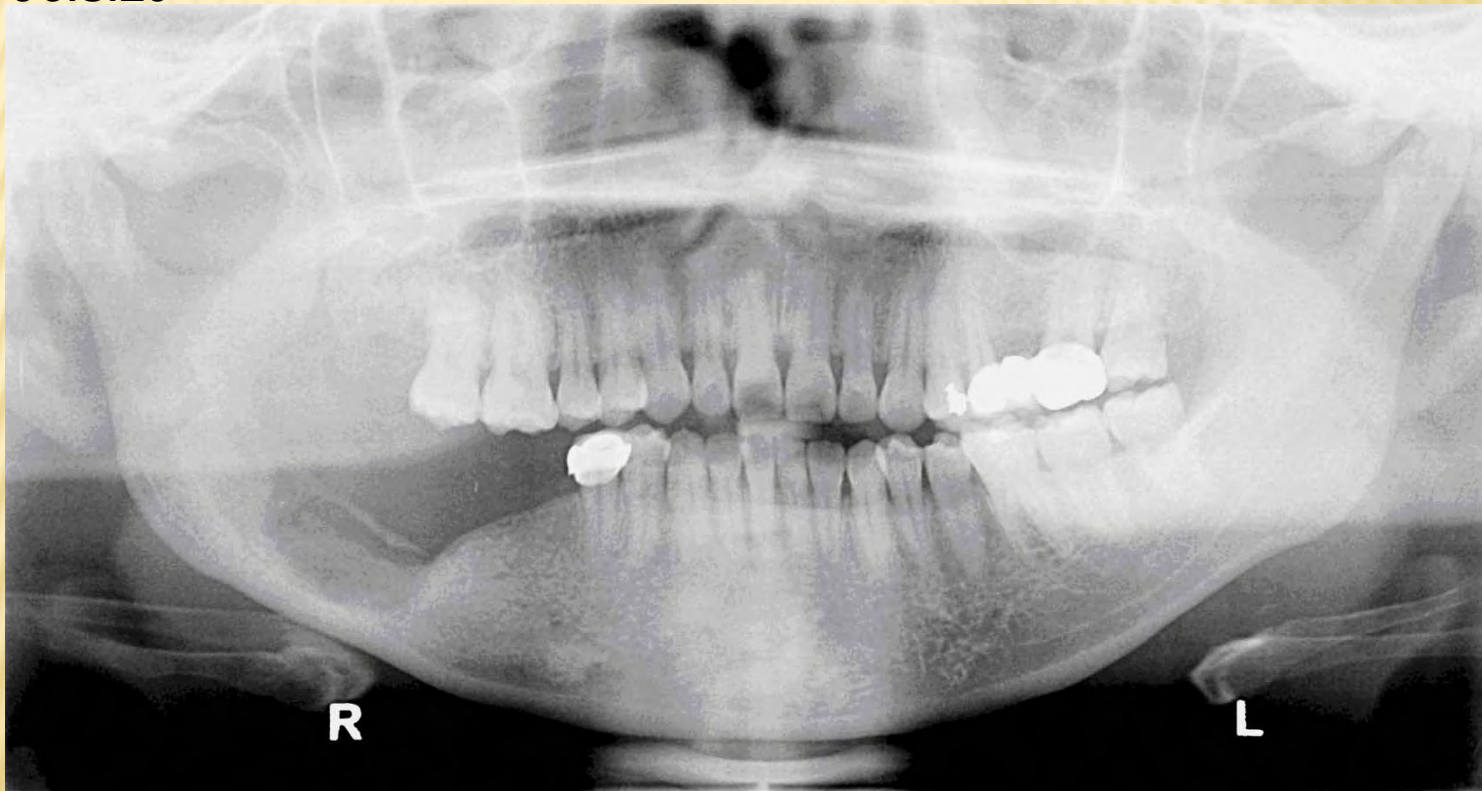
- OP on 96.5.16 : excision + Bone trimming

96.6.15



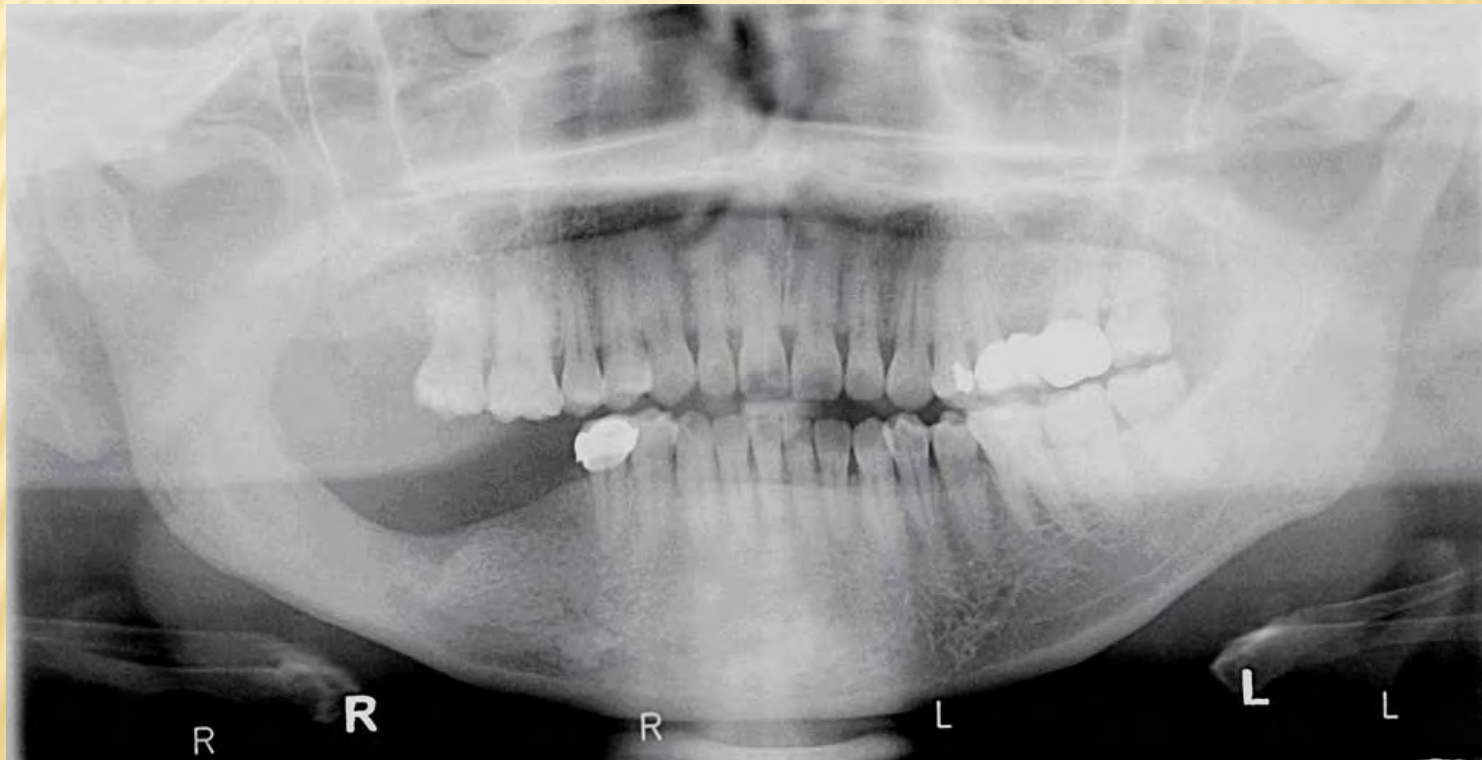
- 96.8.10
  - Radiolucent lesion over posterior margin of the lesion with radiopacities
  - Excision of the RO lesion, bone, H-P: osteomyelitis

96.8.10



- 96.12.7~98.2.12
  - Regular follow up, Panoremic film: OK

96.12.7



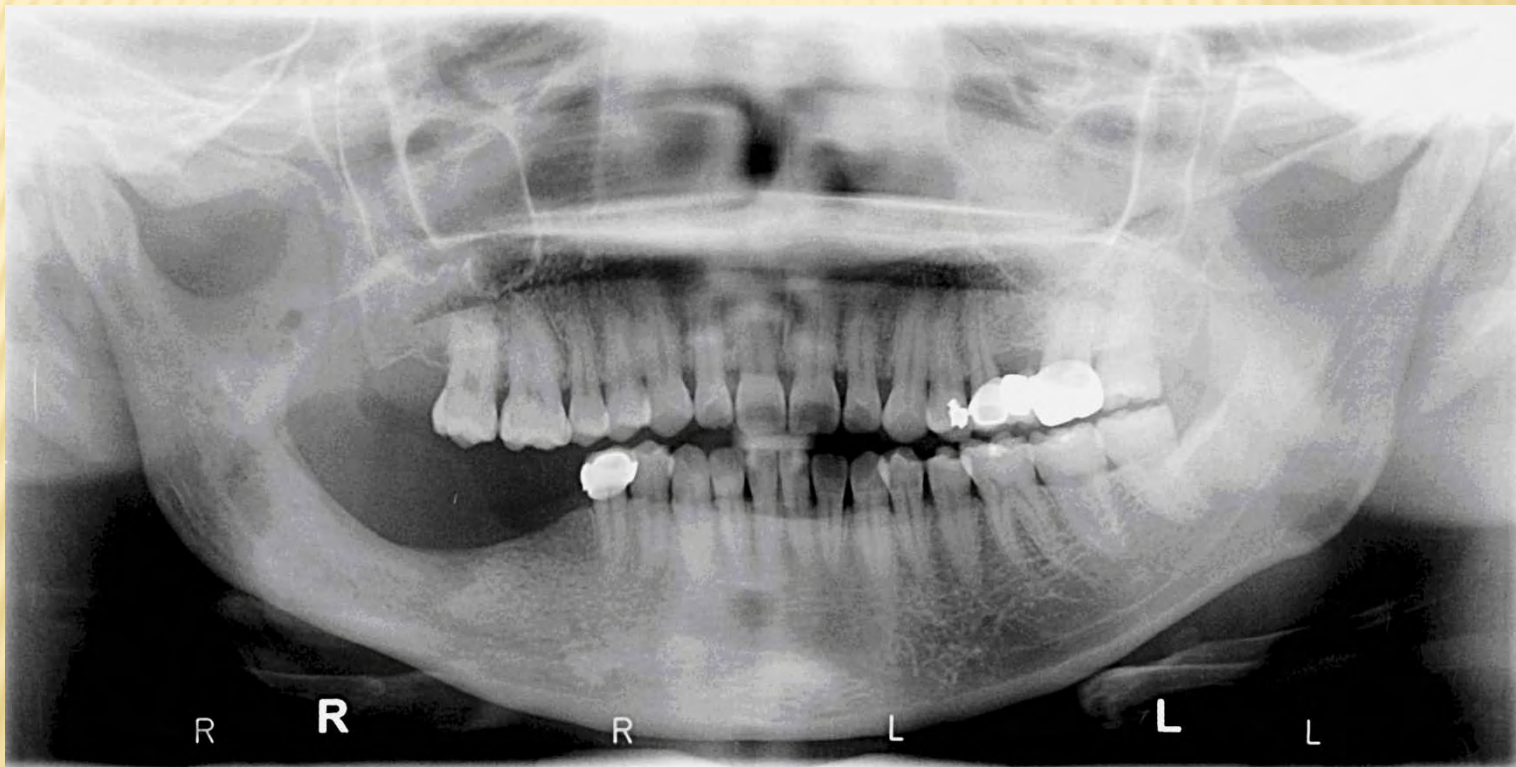
- 96.12.7~98.2.12
  - Regular follow up, Panoremic film: OK

97.2.15



- 96.12.7~98.2.12
  - Regular follow up, Panoremic film: OK

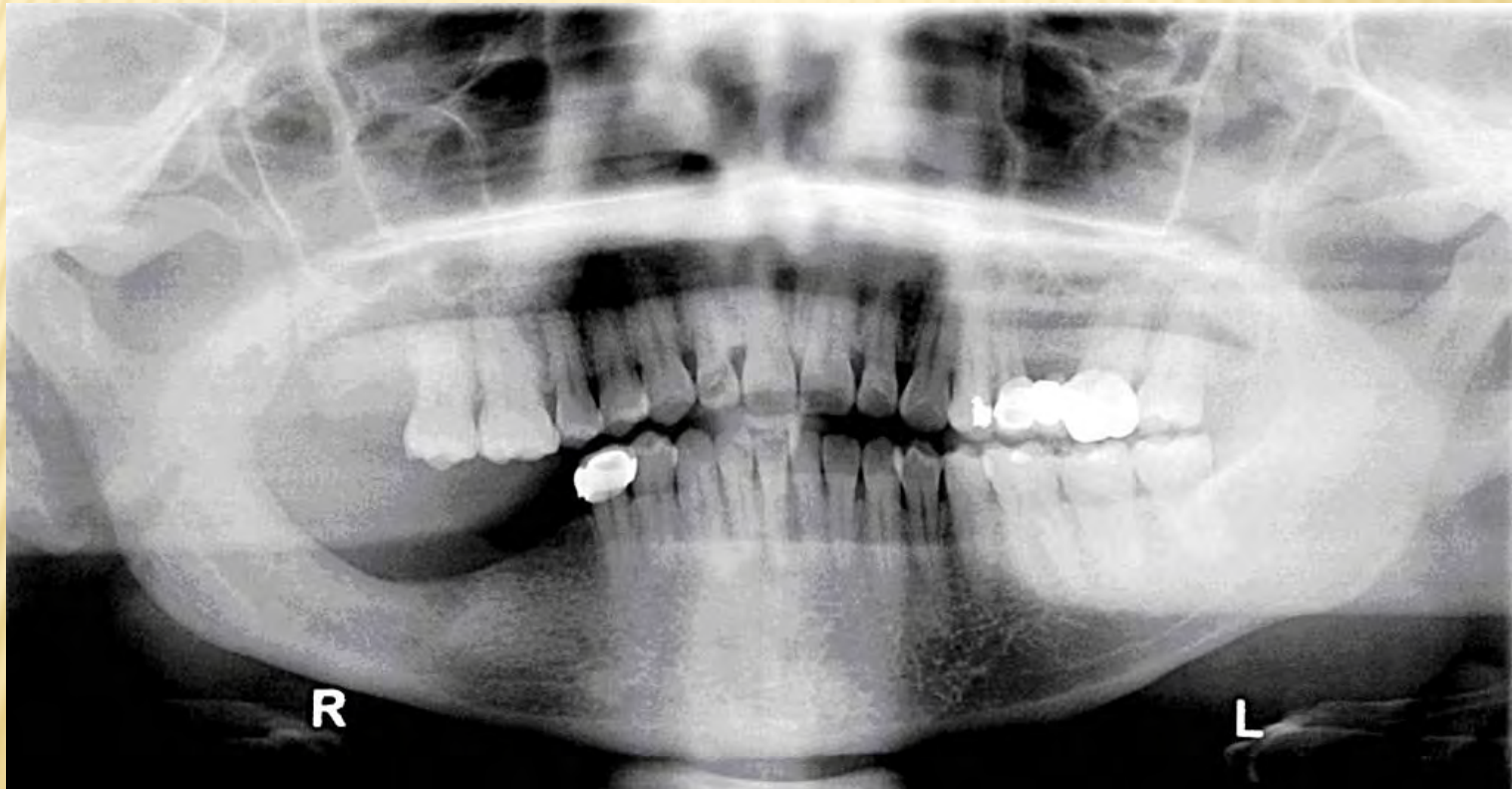
97.8.8



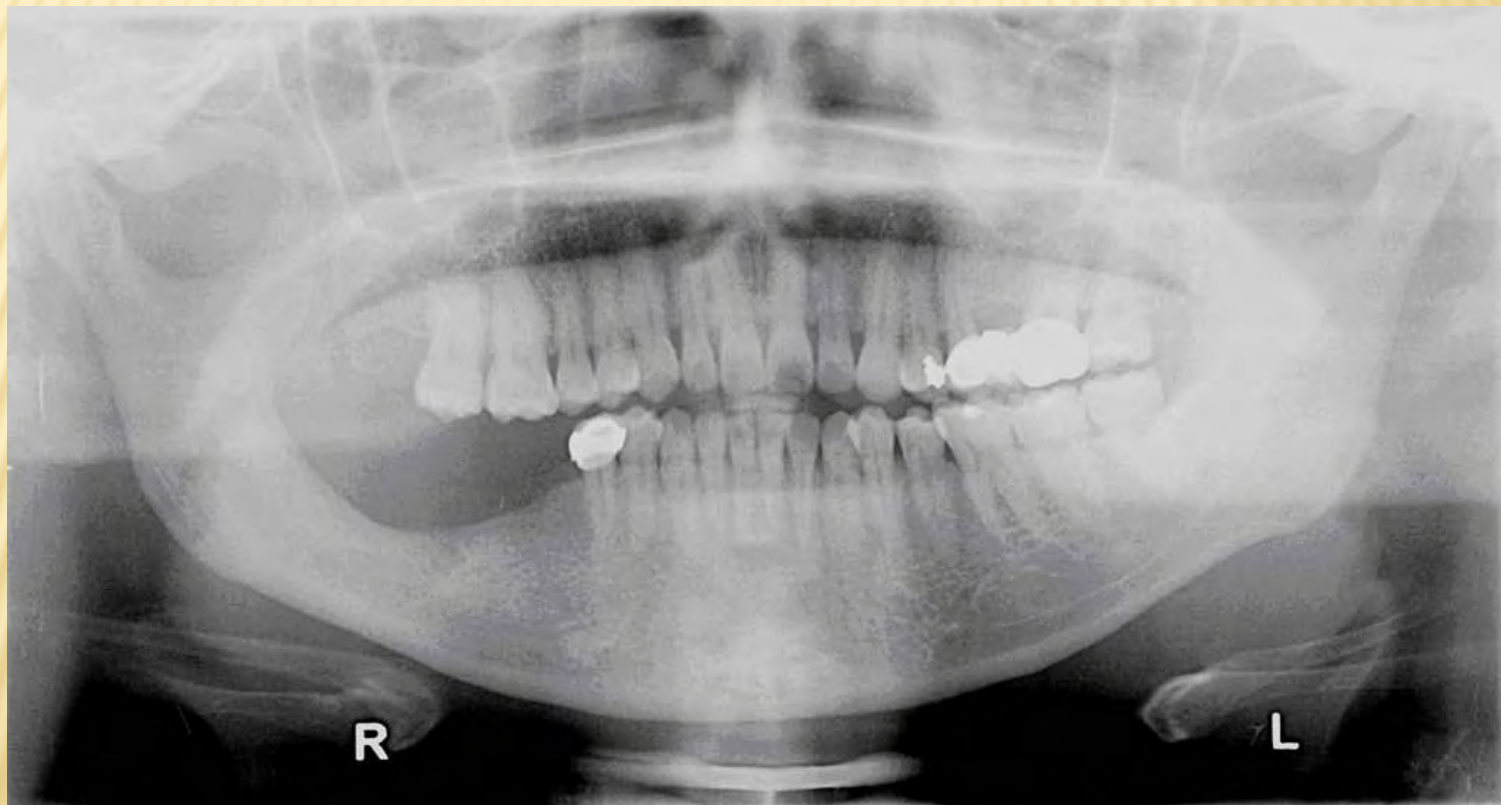


- 98.2.12
  - Panoreamic film: subcoronoid lesions

98.2.12



- 98.5.14
  - Panoreamic film: radiolucent lesion over right coronoid process



- 100.4.7
  - Panorex film: radiolucent lesion over right coronoid process growing larger in diameter ( 15.9x19.0 mm )
  - Arrange OP on 6/3



# PAST MEDICAL HISTORY

---

- + Hospitalization: (+)

  - 91.10 : O.S. ward, ameloblastoma, R't mand., excision + bone trimming

  - 96.5 : O.S. ward, ameloblastoma, R't mand., excision + bone trimming

- + Surgery under GA: (+)

- + Allergy to Pentothal, Tracrium

- + Systemic disease: nil

# PAST DENTAL HISTORY

---

- ✘ Denture, general routine dental treatment
- ✘ Attitude to dental treatment : cooperative

# PERSONAL HABITS

---

- ✘ Alcohol drinking (-)
- ✘ Betel nut chewing (-)
- ✘ Cigarette smoking (-)
- ✘ Denied other specific habit

# DIFFERENTIAL DIAGNOSIS

---

# CLINICAL IMPRESSION

---

- 91年10月：  
Ameloblastoma at right mandibular angle and body
- 96年5月：  
Recurrent ameloblastoma at right mandibular angle and body
- 100年6月：  
Recurrent ameloblastoma at right mandible coronoid process



Inflammation

Cyst

Neoplasm

	Our case	Inflammation	Cyst	Neoplasm
Color	Normal	Red	Normal	Variable
Discharge	-	+	-	-
Consistency	Firm	Rubbery	Soft	Firm
Pain	-	+	-	+/-
Ulceration	-	-	-	+/-
Mobility	Fixed	Fixed	Fixed	Fixed
Duration	1-2 Month(s)	Days	Years	Months

Inflammation

Cyst

Neoplasm

Benign

Malignant

	Our case	Benign	Malignancy
Surface	Smooth	Smooth	Rough
Ulceration	-	-	+
X-ray margin	Well-defined	Well-defined	Poor-defined
Mobility	Fixed	Movable	Fixed
LAP	-	-	+
Duration	1-2 Month(s)	years	Months

Inflammation

Cyst

Neoplasm

Benign

Malignant

Central

Peripheral

	Our case	Central	Peripheral
Consistency	Firm	Firm	Rubbery
Ulceration	-	+/-	+/-
Induration	-	-	+
X-ray border	well-defined	well-defined	ill-defined
Bony expansion or perforation	+	+/-	+
Mobility	Fixed	Fixed	Fixed

Inflammation

Cyst

Neoplasm

Benign

Malignant

Central

Peripheral

# WORKING DIAGNOSIS

---

- Recurrent ameloblastoma, right coronoid process
- Odontogenic keratocyst



# AMELOBLASTOMA

---

- ✘ Without pain
- ✘ 20-70 y/o
- ✘ 80-85% posterior mandibular、cortical bone expansion、易造成牙根吸收
- ✘ Multilocular RL、local invasive、易復發(50% - 90%)
- ✘ Firm or fluctuant with straw colored fluid

# COMPARISON

	Our case	Ameloblastoma
Gender	F	Both (M~F)
Age	24	20-50 (40)
Site	Right posterior mandible	Mandible 80% Posterior 70%
Pain	-	-
Ulcer	-	-
LAP	-	-
Consistency	Firm	Firm/Fluctuant
Shape	Well-defined	ill-defined Ragged borders
Features	Radicular, radiolucent, smooth contours	Multilocular, erode cortical plates

# ODONTOGENIC KERATOCYST

- × 10-40 y/o
- × Posterior mandible、較少造成bone expansion
- × Well defined unilocular RL，有時會有scallop-border、multilocular、少造成牙根吸收
- × Firm fluctuant
- × 易復發 (5% - 62%)
- × Cheesy, yellow substance

# COMPARISON

	Our case	OKC
Gender	F	M=56.9%
Age	24	10-30(28)
Site	Right posterior mandible	Mandible 65% 3rd molar
Pain	-	-
Ulcer	-	-
LAP	-	-
Consistency	firm	firm
Shape	Well-defined	Well-defined Scallop border
Features	Radicular, radiolucent, smooth contours	Hazy radiolecency

# HISTOPATHOLOGIC DIAGNOSIS

---

- Recurrent ameloblastoma (follicular type), right coronoid process

Ameloblastoma

# DISCUSSION

---

# HISTOPATHOLOGIC DIAGNOSIS

---

- Recurrent ameloblastoma  
initial: desmoplastic type  
1<sup>st</sup> recur: plexiform and acanthomatous type  
2<sup>nd</sup> recur: follicular type

# AMELOBLASTOMA

---

- × 臨床上可分為三種類型：
  - + Conventional (intraosseous): 86%
  - + Unicystic: 13%
  - + Peripheral (extraosseous): 1%
- × 佔所有odontogenic tumor第2位
- × 是種slow growing, local invasive的腫瘤
- × 可能跟TNF-alpha, antiapoptotic protein, interface protein (FGF)過度表現有關



# CLINICAL FEATURES

- ✘ Sex predilection: none
- ✘ Age predilection: 20~70歲平均分布
- ✘ Racial predilection: none
- ✘ Site predilection: 80~85%在mandible，特別是 molar-ramus area

	Anterior	Premolar	Molar
Maxilla	6%	1%	6%
Mandible	10%	11%	66%

- 
- ✘ Symptom and sign:
  - ✘ Pain and paresthesia並不常見
  - ✘ 當tumor很大，造成cortical bone expansion，觸診時有eggshell cracking的感覺

# RADIOGRAPHIC FEATURES:

- ✘ Multilocular RL:呈現Soap bubble(肥皂泡)或honeycombed(蜂窩狀)
- ✘ Combine impacted tooth常見:多半是mandible 3rd molar
- ✘ Buccal 和lingual 的bony expansion常見
- ✘ 鄰近牙齒的牙根常見吸收
- ✘ 但有一種特別的分類叫desmoplastic ameloblastoma，好發在anterior maxilla區，因其有很緻密的fibrous stroma，呈現RL+RO

# HISTOPATHOLOGIC FEATURES

- ✘ 沒有capsule，或並不明顯
- ✘ 基本構造細胞有三種
- ✘ Ameloblast-like cell:
  - ✓ High columnar (高柱狀) epithelial cell
  - ✓ Reversed polarity:核偏一邊，會遠離basal membrane，朝向stellate reticulum

---

## ✘ Stellate reticulum

- ✓ loosely arranged angular epithelial cell

## ✘ Mature fibrous stroma:

- ✓ 是成熟，成束的fibroblast
- ✓ 是中胚層來源

✘ 顯微鏡下多變，有幾種分類的方式：

依island的形狀與細胞排列方式	依stellate reticulum的變化來分	依fibrous stroma的緻密度來分
Follicular Plexiform	Acanthomatous type Granular cell type Basal cell type	Desmoplastic type

# DIFFERENTIAL DIAGNOSIS

All type	
follicular	團狀，最常見，microcyst
plexiform	索狀
acanthomatous	Squamous metaplasia
Granular cell	Granular cell, lysosome, young, more aggressive
Basal cell	最少見，stellate reticulum 很少，basaloid cell
desmoplastic	Dense stroma, enamel-like island, RL+RO, 上顎前牙, transforming growth factor beta

# TREATMENT AND PROGNOSIS:

- ✘ 具有局部侵犯性(local invasive)，實際病灶會浸潤到周邊的bone，使真正的tumor size，比起X-ray或臨床診斷的更大，故需要wide resection
- ✘ Recurrence rate高達50~90%



**THANKS FOR YOUR ATTENTION**

---