

指導醫師：林立民醫師、陳玉昆醫師、陳靜怡醫師

報告者：Intern L 組

林晏任、蔡昀蓁、柯琪恩、葉才瑋

報告日期：2014.07.29

# OM CASE REPORT

# General Data

- Name : ○ ○ ○
- Sex : Male
- Age : 14 years old
- Native : Unknown
- Marital status : 未婚
- Attending staff: ○ ○ ○ 醫師
- First visit : 103/07/04

# Chief Complaint

- Ask for examination of a suspected odontoma in the region of upper left posterior area.



# Present Illness

- ◎ This 14-year-old male was informed that he didn't have tooth 27 eruption by a LDC dentist, so he took panorex film and CT scan, and the dentist told him it may be an odontoma and suggested him to come to our OPD for further treatment.

# Intraoral examination

- Missing tooth: Tooth 27
- Bone expansion (+)
- Tenderness/Pain +
- Paresthesia: Unknown
- Ulcer (-)
- Normal appearance of palatal mucosa and no abnormal findings for teeth over left posterior maxilla



# Extraoral examination

- No obvious swelling over the facial area

# Past medical history

## Past Medical History

- Systemic diseases (-)
- Hospitalization (-)
- Surgery under GA (-)
- Food & drug allergies (-)

# Past dental history

- Routine dental treatment
- Attitude to dental treatment: Co-operative



# Personal History

- ⦿ Risk factor related to malignancy
  - Alcohol drinking (-)
  - Betel quid chewing (-)
  - Cigarette smoking (-)
- ⦿ Special oral habits: Denied
- ⦿ Family history:
  - Similar facial profile in relatives: Unknown

# Radiographic examination - 1



There is a well-defined homogenous radiopacity with radiolucent rimming containing high position impaction 27 with corticated margin over the left posterior maxilla, extending from the distal side of tooth 24 to the left maxillary tuberosity, and from 2/3 height of left maxillary sinus to the left maxillary alveolar crest of molar area, measuring approximately 3.3x3.0 cm. The inferior border of left maxillary sinus seems to not be continuous, may be affected by the lesion. Root resorption on tooth 26 is not obvious.

# Radiographic examination - 2



Missing tooth: Tooth 28

Operative dentistry: Tooth 16,36,46

Unerupted tooth: Tooth 18,38,48

# Differential diagnosis

# Peripheral or Intrabony

- ⦿ Left posterior maxillary area
- ⦿ Pain (+)
- ⦿ Tenderness (+)
- ⦿ Induration (-)
- ⦿ Bone expansion (+)

# Intrabony or peripheral

|                  | Our case | Peripheral | Intrabony |
|------------------|----------|------------|-----------|
| Mucosal lesion   | -        | +          | -         |
| Induration       | -        | +/-        | +         |
| Bony expansion   | +        | -          | +/-       |
| Bone destruction | +        | -          | +/-       |

→ Intrabony

# Inflammation, Cyst or Neoplasm

|            | Our case | Inflammation |
|------------|----------|--------------|
| Redness    | -        | +            |
| Swelling   | +        | +            |
| Local heat | -        | +            |
| Pain       | +        |              |

|                     | Our case | Cyst |
|---------------------|----------|------|
| Fluctuation         | -        | +/-  |
| Well defined border | +        | +    |
| Bone expansion      | +        | +/-  |

Due to panorex finding:

Large **homogeneous RO** destruction lesion

→ tumor or cyst



|                  | Our case | Inflammatory cyst | Non-inflammatory cyst |
|------------------|----------|-------------------|-----------------------|
| Pain, tenderness | +        | +                 | -                     |
| Local heat       | -        | +                 | -                     |
| Color            | Pink     | Reddish           | Pink                  |
| Progression      | Slow     | Fast              | Slow                  |
| Sclerotic margin | +        | -                 | +                     |

|                                 | Our case     | Benign       | Malignance  |
|---------------------------------|--------------|--------------|-------------|
| Border                          | Well-defined | Well-defined | Ill-defined |
| Margin                          | Smooth       | Smooth       | Irregular   |
| Sclerotic margin                | +            | +            | -           |
| Destruction of cortical margin  | -            | + -          | +           |
| Progression                     | Slow         | Slow         | Fast        |
| Swelling with intact epithelium | +            | +            | -           |
| Pain                            | +            | -            | +           |
| Induration                      | -            | -            | +           |

● Non-inflammatory cyst or benign tumor

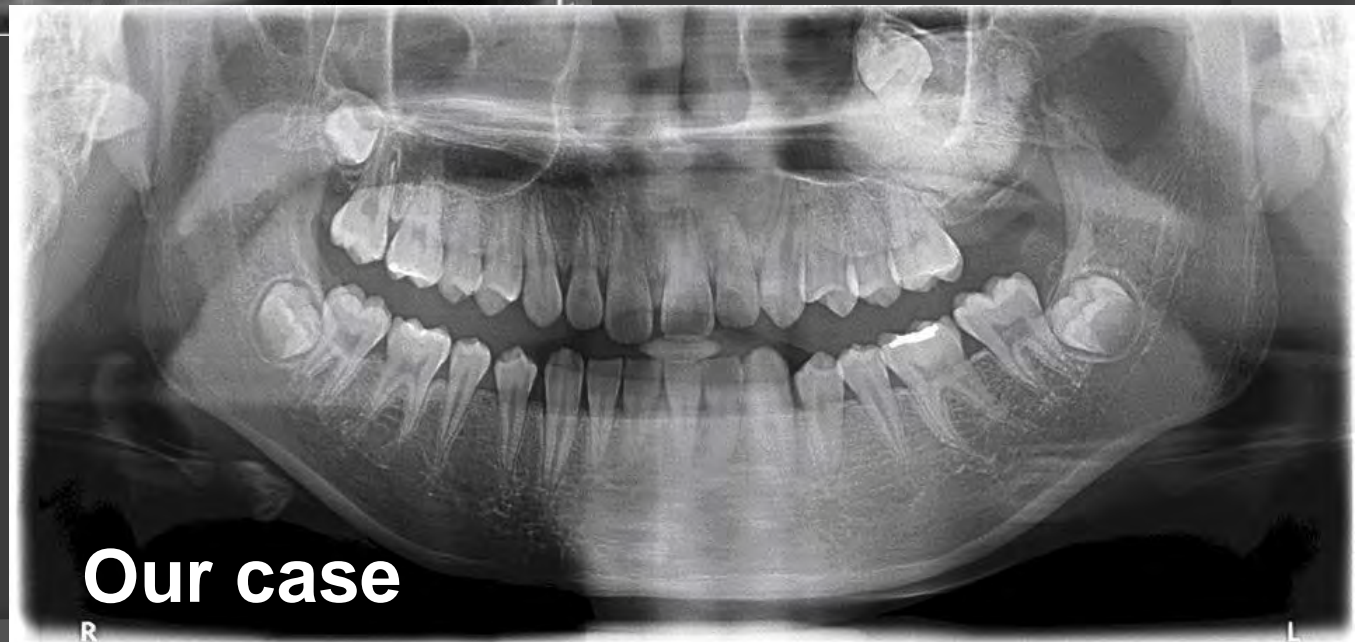


# Differential diagnosis

- Ameloblastic fibro-odontoma
- Complex odontoma
- Ossifying fibroma
- Calcifying epithelial odontogenic tumor

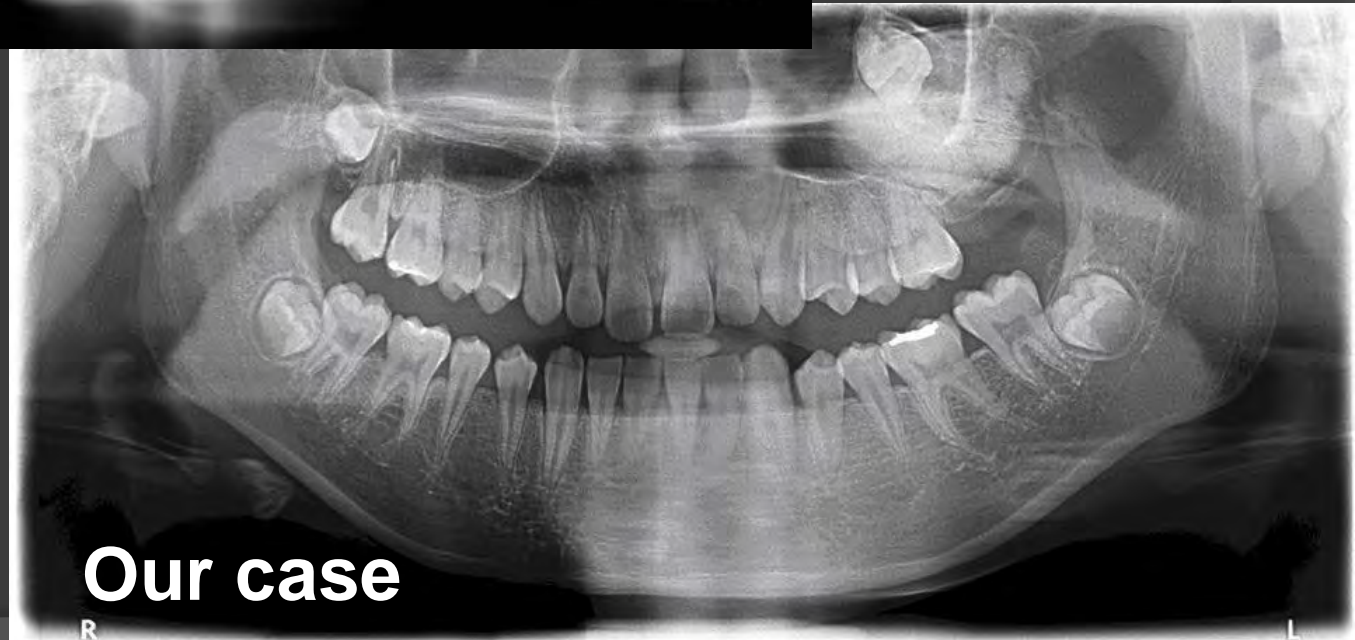
# Ameloblastic fibro-odontoma

|  | Our case  | AFO  |
|--|---|--|
| Gender                                 | male  | equal  |
| Age                                    | 14  | 0~20   |
| Site                                   | Maxillary (molar area)  | Posterior, especially mandible   |
| Paresthesia                            | +   | -  |
| Swelling                               | +   | +  |
| Drainage                               | -   | -  |
| Radiography                            | Well-defined,<br>RO mass with RL rim,<br>corticated margin<br>Unerupted tooth | Well-defined<br>Unilocular RL with RO mass<br>Unerupted tooth involved |
| Bony expansion                         | +   | +  |
| Teeth displacement/<br>root resorption | +   | +  |
| Duration                               | Slow  | Slow   |



# Complex odontoma

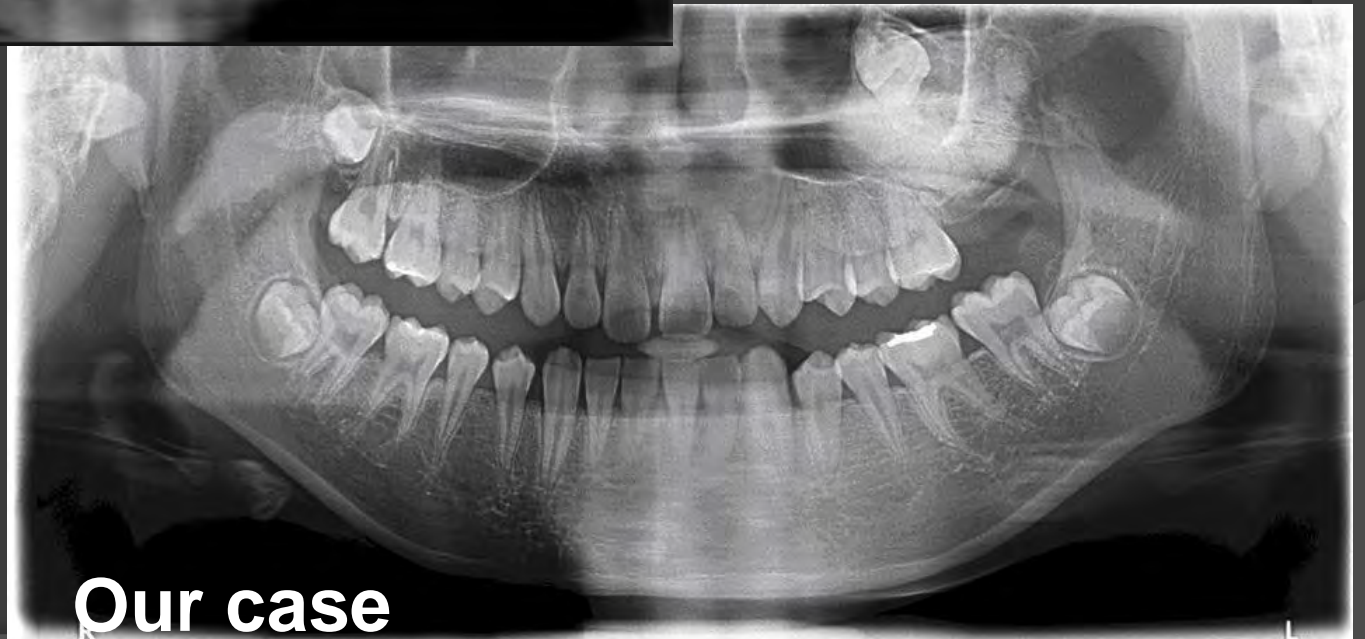
|  | Our case  | Odontoma complex   |
|--|---|--|
| Gender                                 | male  | equal  |
| Age                                    | 14  | 0~20 (mean:14)   |
| Site                                   | Maxillary (molar area)  | Molar area   |
| Paresthesia                            | +   | -  |
| Swelling                               | +   | +  |
| Drainage                               | -   | +  |
| Radiography                            | Well-defined,<br>RO mass with RL rim,<br>corticated margin<br>Unerupted tooth | Well-defined<br>Unilocular RL with RO mass<br>Unerupted tooth involved |
| Bony expansion                         | +   | +  |
| Teeth displacement/<br>root resorption | +   | +  |
| Duration                               | Slow  | Slow   |





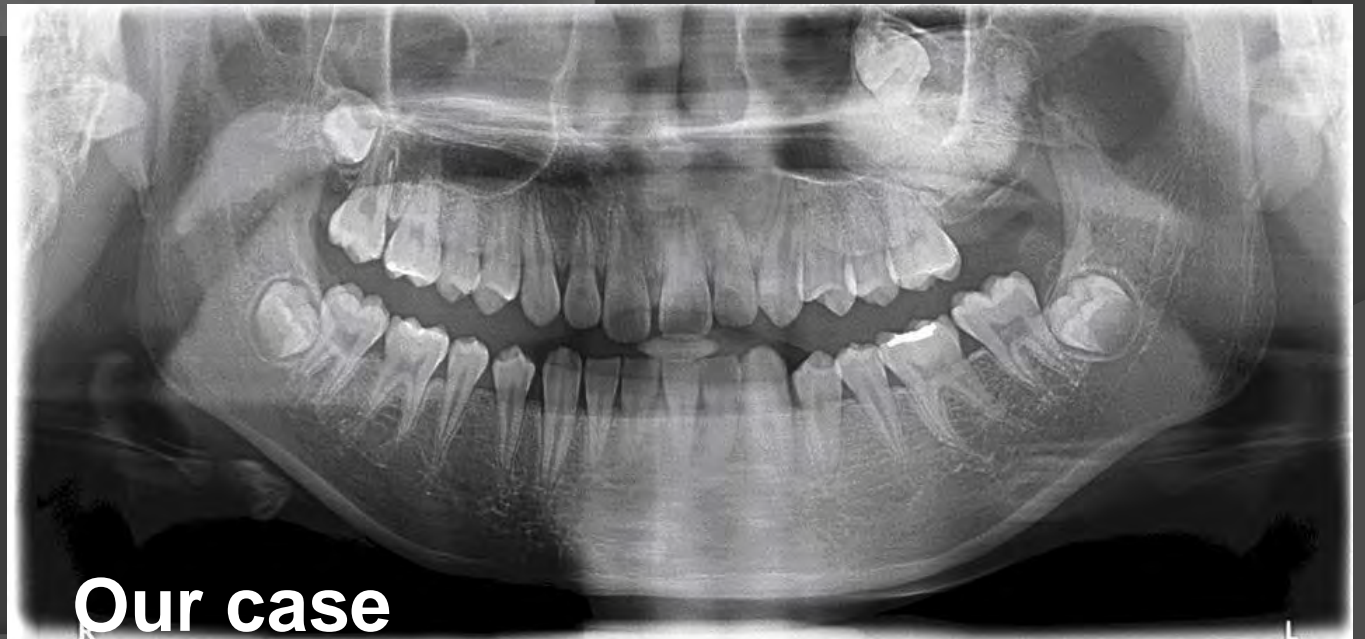
# Ossifying fibroma

|  | Our case  | OF   |
|--|---|--|
| Gender                                 | male  | Female   |
| Age                                    | 14  | 30~50  |
| Site                                   | Maxillary (molar area)  | Posterior, mandible                            |
| Paresthesia                            | +   | -  |
| Swelling                               | +   | +  |
| Drainage                               | -   | -  |
| Radiography                            | Well-defined,<br>RO mass with RL rim,<br>corticated margin<br>Unerupted tooth | Well-defined<br>unilocular<br>RO mass involved |
| Bony expansion                         | +   | +  |
| Teeth displacement/<br>root resorption | +   | -  |
| Duration                               | Slow  | Slow   |



# Calcifying epithelial odontogenic tumor

|   | Our case   | CEOT  |
|---|--|---|
| Gender                                    | male   | equal   |
| Age                                       | 14   | 30~50   |
| Site                                      | Maxillary (molar area)   | Mandible (posterior)  |
| Paresthesia                               | +  | -   |
| Swelling                                  | +  | +   |
| Drainage                                  | -  | -   |
| Radiography                               | Well-defined,<br>RO mass with RL rim,<br>corticated margin<br>Unerrupted tooth | Well-defined<br>Uni / multi-locular RL<br>(unilocular more common in maxilla)<br>Associated with impacted tooth |
| Bony expansion                            | +  | +   |
| Teeth<br>displacement/ root<br>resorption | +  | +   |
| Duration                                  | Slow   | Slow  |



**Our case**

# Clinical Impression

- Ameloblastic fibro-odontoma, left posterior maxilla

# Ameloblastic fibro-odontoma

- ◎ Clinical presentation
  - Age: 1<sup>st</sup> & 2<sup>nd</sup> decades
  - Region: posterior, mandible
  - Jaw expansion may present
  - Asymptomatic

# Ameloblastic fibro-odontoma

- Benign
- Slow growing
- Painless
- Expansile
- Inhibit tooth eruption or displace

# Ameloblastic fibro-odontoma

- ⦿ Radiographic feature
  - Well-defined
  - Unilocular RL with RO mass
  - Unerupted tooth involved



# Ameloblastic fibro-odontoma

## ● Histology

- Lobulated, cellular mesenchymal component with proliferating odontogenic epithelium in cords and islands
- Enamel matrix, dentin formation associated with odontoma

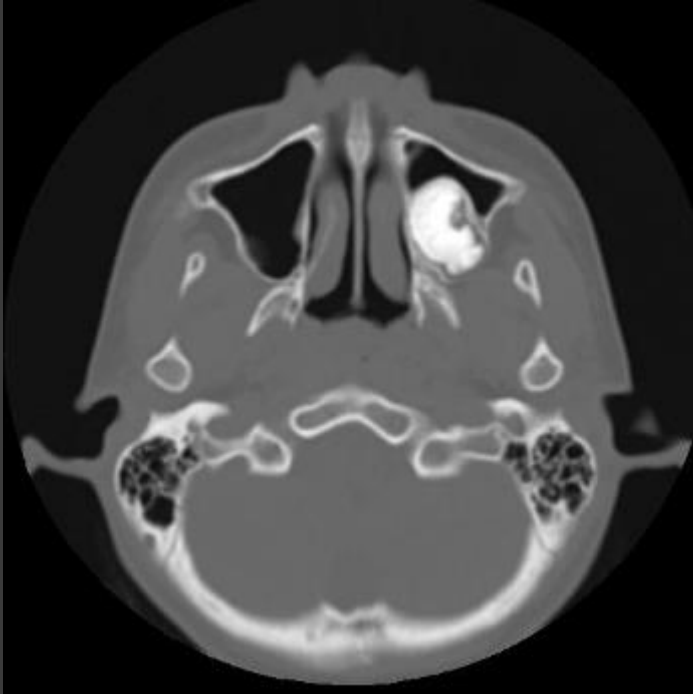
# Ameloblastic fibro-odontoma

- ⦿ Treatment
  - Conservative surgical excision/curettage
- ⦿ Prognosis
  - Excellent

# Treatment plan

- ◎ First visit: 103 / 7 / 04
  - Arrange OP, GA routine
  - CT image

# Treatment plan



A sclerotic well-defined mass lesion (2.80 x 1.95 x 2.58 cm) in the left maxillary sinus arises from inferior and posterior border of the maxillary sinus. with kind of bone expansion, homogeneous tumor matrix with capsule is noted.

Right ethmoid and sphenoid sinusitis

DDx: cementoma, ossifying fibroma

# Treatment plan

- ◎ OP: 103 / 07 / 09
  - Routine p't identification check
  - Time out
  - Routine aseptic and draping procedure
  - Prophylactic antibiotic
  - Throat pack, OP start
  - Intrasulcular incision from 26 to 27 distal
  - Triangular flap reflection

- Bone tumor excision , sent for HP exam
- Sinus membrane intact
- Complicated extraction of 27
- Copious N/S irrigation
- Gelfoam soaking
- Suture with 3-0 vicryl
- Throat pack out, OP ended

# Histo-pathologic examination -1

- ◎ 組織名稱：Maxilla, left
- ◎ 臨床診斷：Benign neoplasm
- ◎ 腫瘤代碼：(M-9290/0)
- ◎ **Pathologic diagnosis:**  
Bone, maxilla, left, **excision, ameloblastic fibro-odontoma**

- ◎ **Gross Examination**

The specimen submitted consists of 2 soft tissue fragments and more the 10 hard tissue fragments in 2 bags, measuring up to 2.0 x 1.5 x 0.9 cm in size, fixed in formalin. Grossly, they are whitish and brownish in color, rubbery and bony hard in consistency.

All for section and labeled as follows: Jar O.

A: 左上顎tumor capsule

B1-3: 左上顎TUMOR

B1: tumor

B2-3: tumor and tooth

# Histo-pathologic examination -2

## ● **Microscopic Examination:**

The slides contains two identical groups of irregular-shaped soft and decalcified hard tissue specimens.

Microscopically, it is characterized by **ameloblast-like tumor islands** infiltrated in immature fibrous stroma and dense fibrous tissue in section A. Sections B1-3 are characterized by **complex and compound odontoma and a tooth crown**.



Following above episode,  
it shows ameloblastic fibro-odontoma

# Case report

Iran J Otorhinolaryngol., Seyed  
Ali Banihashem Rad, Apr 2014

# Present illness

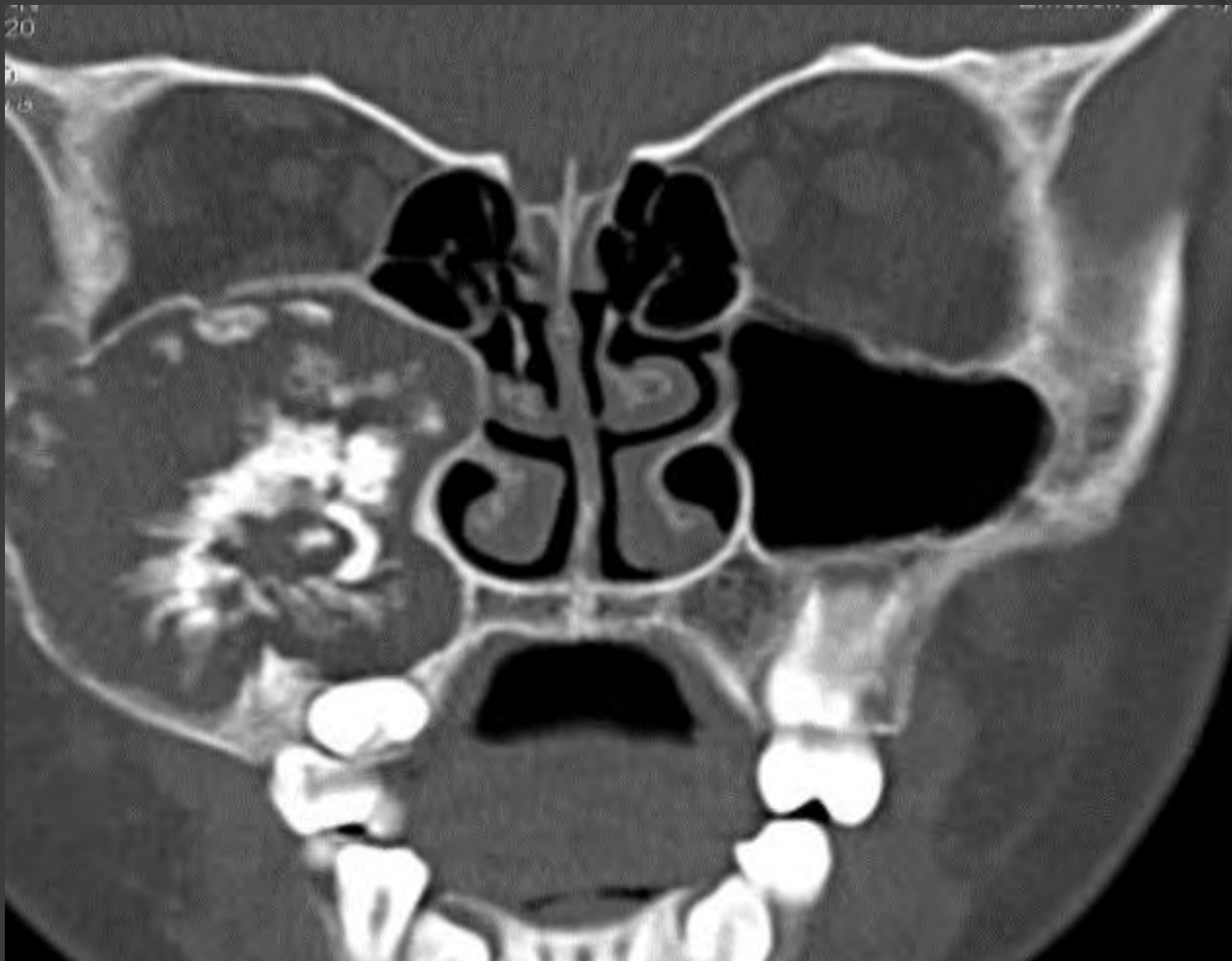
- An 11-year-old girl was referred to the Department of Oral and Maxillofacial Surgery, Mashhad Dental School, Iran for evaluation of a **facial swelling** of 6 months duration.

# Past medical history

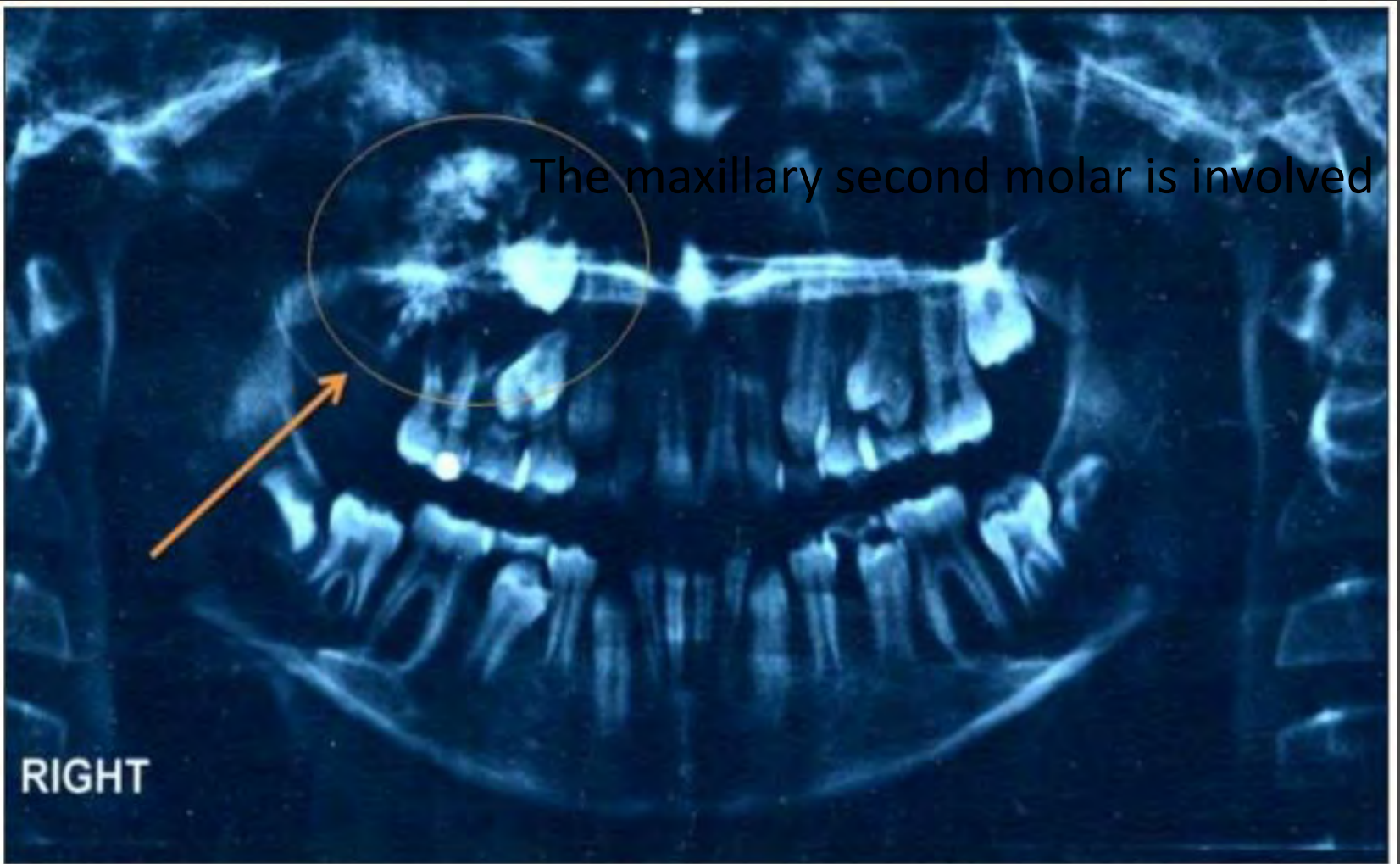
- ⦿ History of systemic disease or trauma: (-)
- ⦿ Food or drug allergies: unknown
- ⦿ Hospitalization: unknown
- ⦿ Attitude to dental treatment: unknown

# Examination

- ⦿ Extra oral examination:
  - An **asymptomatic swelling** on the right side of the maxilla without s/s of inflammation.
- ⦿ Intra oral examination:
  - A bony hard bulge was palpable in the maxillary vestibule.
  - **Missing 2nd molar**



A well-defined, radiolucent lesion in the maxillary sinus which contained several radiopaque materials of varying sizes and shapes



The maxillary second molar is involved

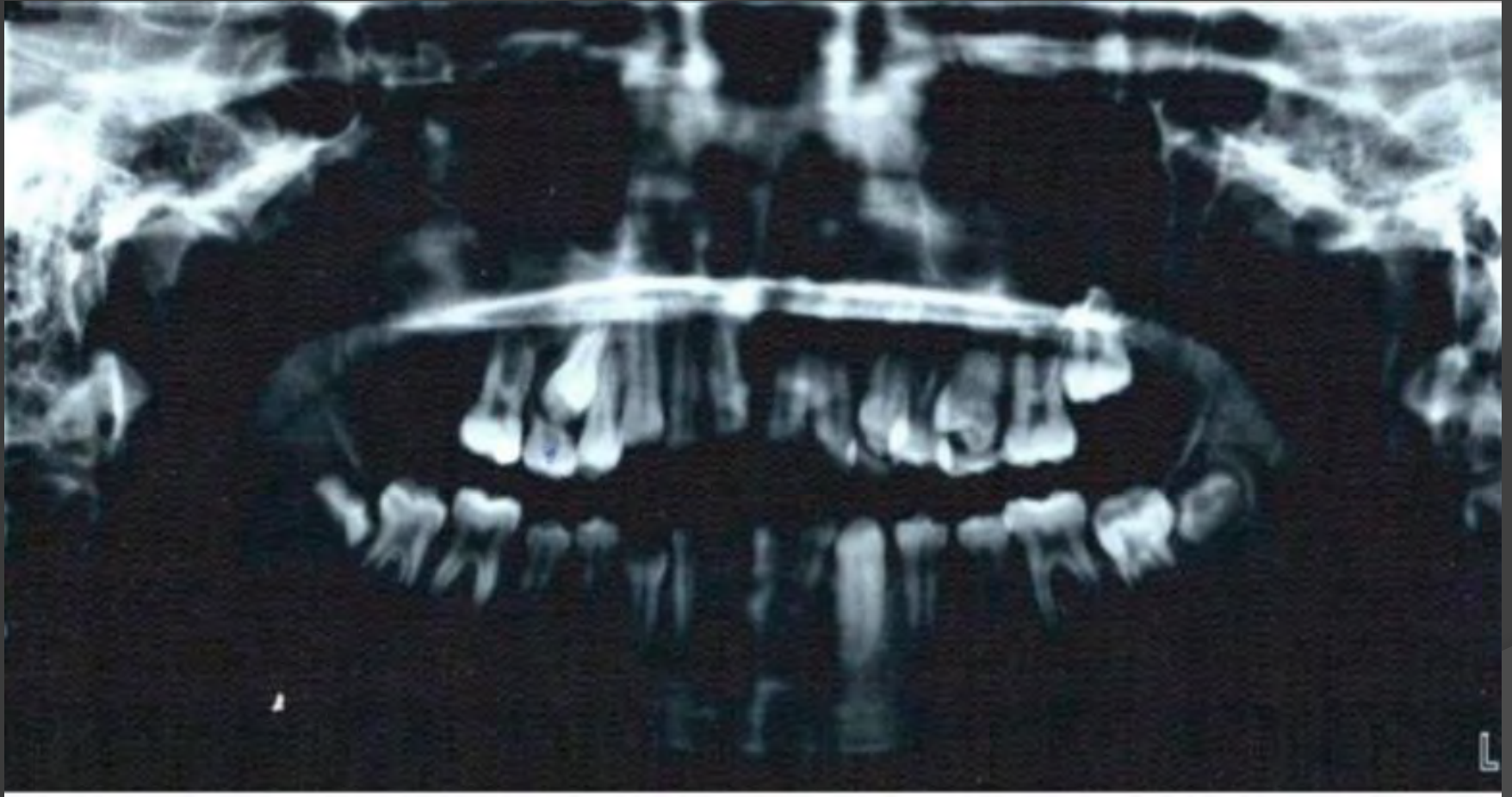
RIGHT

# Treatment

- ① Under general anesthesia an incision was made intraorally.
- ② A full thickness flap from second incisor to the tuberosity was reflected.
- ③ After bone removal of the sinus wall, access to the lesion was completed. The lesion and the impacted second molar were enucleated.



# Post-treatment



The panoramic view of the patient 4 weeks after surgery

# Post-treatment



The panoramic view of the patient 12 weeks after surgery. The right second premolar is in eruption

# Post-treatment

- Postoperatively, after twelve months, no evidence of residual or recurrent disease was found

# Reference

- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3989876/>

# 醫學倫理討論

Tom Beauchamp & James Childress  
六大原則 - 1979

1. 行善原則(Beneficence)：亦即醫師要盡其所能延長病人之生命且減輕病人之痛苦。
2. 誠信原則(Veracity)：亦即醫師對其病人有「以誠信相對待」的義務。
3. 自主原則(Autonomy)：亦即病患對其己身之診療決定的自主權必須得到醫師的尊重。
4. 不傷害原則(Nonmaleficence)：亦即醫師要盡其所能避免病人承受不必要的身心傷害。
5. 保密原則(Confidentiality)，亦即醫師對病人的病情負有保密的責任。
6. 公義原則(Justice)，亦即醫師在面對有限的醫療資源時，應以社會公平、正義的考量來協助合理分配此醫療資源給真正最需要它的人。

# 行善原則

- ◎ 做了Excision 後是否有減輕p't的疼痛感？或是使p't更不舒服？
  - 有減輕swelling的情形，術後傷口會疼痛，但傷口有持續癒合，等到完全恢復後不會有疼痛現象。

# 誠信原則

- ◎ 是否有清楚的向病人說明清楚疾病病程、治療計畫、預後、風險？
- ◎ 對於病人疾病嚴重程度是否有誠實的通知，盡到告知的義務？

→ 已告知病人。



# 自主原則

- ◎ 充分說明病情及治療計畫、風險之後，是否有讓病人充分自主的選擇治療計畫？

→ 已充分說明。

- ◎ 在做全身麻醉以前，是否有說明完整之後再請病人自主的簽名同意？

→ 已充分說明。

# 不傷害原則

- ◎ 手術過程中，是否有造成不必要醫源性的傷害？  
→ 沒有不必要醫源性傷害。
- ◎ 是否有詳實的說明治療計畫，並讓病人對於治療計畫沒有疑問？  
→ 有詳實說明並取得病患同意。

# 保密原則

## 告知的對象

1. 本人為原則
2. 病人未明示反對時，亦得告知其配偶與親屬
3. 病人為未成年人時，亦須告知其法定代理人
4. 若病人意識不清或無決定能力，應須告知其法定代理人、配偶、親屬或關係人
5. 病人得以書面敘明僅向特定之人告知或對特定對象不予告知

# 公義原則

- ◎ 手術的必要性？

→ 病灶太大，且已經有脹痛現象產生，建議手術切除。

# 醫學倫理總結

- ◎ 在病例撰寫方面(病兆描述,治療計畫,病人態度)應書寫詳盡，使治療過程有詳實的記錄及治療順利。
- ◎ 在進行治療之前,須請病人簽屬同意書
- ◎ 應在不違反醫學倫理的原則之下進行治療的行為

**THANK YOU FOR YOUR  
ATTENTION!**