CASE REPORT

Intern - I組

組員
廖國良 蕭如君 陳盈璞 陳冠宇

指導老師
林立民 醫師 陳玉昆 醫師 王文岑 醫師 陳靜怡 醫師
General Data

Name: 謝XX
Gender: Male
Age: 16
Occupation: 學生
Attending V.S.: 王文岑 醫師
First visit: 98/5/20
Chief Complaint

A swelling mass over lower left vestibule area, extending to nearby teeth for 1 month
Present Illness

This 16-year-old male patient is suffered from a swelling mass over his left lower vestibule area and the nearby teeth for 1 month. He went to LDC for help a week ago, and the doctor suggested him to come to our OPD for further examination and treatment.
Past History

- Past Medical History
  - Drug allergy: Denied
  - Taking drug: Denied
  - Systemic disease: Denied
  - DM: Denied
  - HT: Denied

- Past Dental History
  - OD restoration Tx.
Risk Factors Related to Malignancy

- Alcohol: (-)
- Betel quid: (-)
- Smoking: (-)
Intraoral Examination

An irregular shaped mass with smooth surface, sessile base, normal color was found over left lower vestibular area and measured about 2.0X2.0 cm in diameter
Physical Examination

- Mobility: Fixed
- Consistency: Bony hard
- Fluctuation (-)
- Pain (-)
- Tenderness (-)
- Induration (-)
- Lymphadenopathy (-)
- EP test: Tooth 34 (+), tooth 35 (-), tooth 36 (+)
There is a well-defined unilocular oval shaped radiolucence with a regular corticated margin between the tooth 34 and 36 apical area, extending from tooth 34 apex area to the furcation area of tooth 36 and from tooth 45 mesial side to mandibular canal upside, measuring approximately 3.4X2.4 cm in diameter. The lesion push tooth 45 and 46 away and causes tooth 34, 35, and 36 mesial root resorption.
Radiographic Examination
(Panoramic film)

Unerupted teeth: 18, 28, 38, 48
Restoration: 16(O), 17(O), 26(O), 27(O), 36(O), 37(O), 46(O), 47(O)
Radiographic Examination
(Periapical film)
Radiographic Examination
(Occlusal film)
Central or Peripheral Lesion?

- No mucosal lesion
- Bone destruction (+)

Central
Inflammation ? Cyst ? Neoplasm?

➢ Fever or local heat? (-)
➢ Pain (-)
➢ Swelling (+) → bony hard swelling
➢ Purulent drainage (-)

Cyst or Neoplasm
- Cyst

Developmental cyst

Odontogenic cyst

Odontogenic cyst
二、Neoplasm

→ Benign or Malignant?

- Pain (-)
- Tenderness (-)
- Lymphadenopathy (-)
- Ulceration (-)
- Induration (-)
- Smooth surface
- Well-defined radiolucency

Benign Tumor
Benign Tumor

- Odontogenic
- Non-odontogenic
Central odontogenic cyst
or
Central odontogenic benign tumor
or
Central non-odontogenic benign tumor
Working diagnosis

Cyst
Odontogenic keratocyst

Odontogenic tumor
Ameloblastoma
Central odontogenic fibroma
Ameloblastic fibroma

Non-odontogenic tumor
Central giant cell granuloma
Cyst
Odontogenic keratocyst
Odontogenic keratocyst

Features

- It is a distinctive form of developmental odontogenic cyst. It arises from cell rests of the dental lamina.
- Common site:
  - Posterior mandible body and ascending ramus
- Usually asymptomatic
- Size: variable
- Well defined radiolucent area with smooth and corticated margin (may appear multilocular, particularly in posterior body and ascending ramus)
# Odontogenic keratocyst

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Odontogenic keratocyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Slightly male predilection</td>
</tr>
<tr>
<td>Age</td>
<td>16y/o</td>
<td>10~40y/o</td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td>Make up 3%~11% of all odontogenic cyst</td>
</tr>
<tr>
<td>symptom</td>
<td>Bony expansion</td>
<td>Asymptomatic</td>
</tr>
<tr>
<td>Site</td>
<td>Lower left buccal vestibular area</td>
<td>49% in posterior mandible body and ascending ramus</td>
</tr>
</tbody>
</table>
Odontogenic keratocyst

Our case

Odontogenic keratocyst
Odontogenic tumor

Ameloblastoma

Central odontogenic fibroma

Ameloblastic fibroma
Ameloblastoma

Features

- May arise from rests of dental lamina
- Common site: About 85% of occur in the mandible, most often in the ascending area
- Often asymptomatic.
- A painless swelling or expansion of the jaw is the usual clinical presentation
- X-ray finding often “soap-bubble” or ”honeycombed” appearance
### Ameloblastoma

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Ameloblastoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>沒差別</td>
</tr>
<tr>
<td>Age</td>
<td>16 y/o</td>
<td>38~40y/o</td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td>25% of all odontogenic tumor.</td>
</tr>
<tr>
<td>Symptom</td>
<td>Swelling mass over his left lower vestibule area and the nearby teeth</td>
<td>Asymptomatic</td>
</tr>
<tr>
<td>Site</td>
<td>Left lower vestibule area and the nearby teeth</td>
<td>80~85% occur in the mandibular molar ascending area.</td>
</tr>
<tr>
<td>Color</td>
<td>Normal</td>
<td>Bluish to normal</td>
</tr>
<tr>
<td>Shape</td>
<td>Dome, sessile</td>
<td>Irregular scalloping</td>
</tr>
<tr>
<td>Size</td>
<td>2x2cm</td>
<td>? (外觀通常都很大)</td>
</tr>
<tr>
<td>Surface</td>
<td>Smooth</td>
<td>Smooth</td>
</tr>
<tr>
<td>Duration</td>
<td>1 month</td>
<td>?</td>
</tr>
</tbody>
</table>
Ameloblastoma

Our case

Unicystic ameloblastoma
Central Odontogenic Fibroma

Clinical Features:
4-80 years (mean 40)
Female: male = 2.2:1
- 1/3 associated with unerupted tooth
- Smaller → Asymptomatic
- Bigger → Localized bony expansion or loosening of teeth
Central Odontogenic Fibroma

Radiographic Features:
- Smaller → well defined, unilocular, radiolucent lesions
- Smaller → Periradicular area of erupted teeth
- Bigger → Multilocular radiolucence, sclerotic border, root resorption, root divergence
- 12% exhibit radiopaque flecks
### Central Odontogenic Fibroma

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>16y/o</td>
<td>Mean age: 40 y/o</td>
</tr>
<tr>
<td>Symptom</td>
<td>Swelling mass over his left lower vestibule area and the nearby teeth</td>
<td>Asymptomatic or localized bony expansion or loosening of teeth if reach a larger size</td>
</tr>
<tr>
<td>Site</td>
<td>Left lower vestibule area and the nearby teeth</td>
<td>Most in ant. maxilla and post. mandible</td>
</tr>
<tr>
<td>Size</td>
<td>2x2cm</td>
<td>-</td>
</tr>
<tr>
<td>Shape</td>
<td>Unilocular</td>
<td>Small: unilocular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Big: multilocular</td>
</tr>
<tr>
<td>Outline</td>
<td>Well-defined with a regular corticated margin</td>
<td>Well-defined with a sclerotic border</td>
</tr>
<tr>
<td>Relative density</td>
<td>Uniformly RL</td>
<td>Uniformly RL</td>
</tr>
<tr>
<td></td>
<td>12% exhibit radiopaque flecks</td>
<td></td>
</tr>
</tbody>
</table>
Central Odontogenic Fibroma

Our case

Central odontogenic fibroma
Ameloblastic fibroma

Features

- True mixed tumor in which epithelial and mesenchymal tissue are both neoplastic
  Most occur in younger patients: 20 y/o younger
- Common site: About 70% of occur in the posterior mandible
- Small: Asymptomatic
  Larger: Swelling of the jaws
- X-ray finding: well-defined RL
  Small: Usually unilocular
  Larger: Multilocular
Ameloblastic fibroma

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Ameloblastic fibroma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>Age</td>
<td>16 y/o</td>
<td>First two decades</td>
</tr>
<tr>
<td>Symptom</td>
<td>Swelling of jaw</td>
<td>No symptoms unless or swelling of jaws</td>
</tr>
<tr>
<td>Site</td>
<td>L’t posterior mandible</td>
<td>Posterior mandible (70%)</td>
</tr>
<tr>
<td>X-ray finding</td>
<td>A well defined RL with a sclerosis margin</td>
<td>Small- a well defined RL with a sclerosis margin</td>
</tr>
</tbody>
</table>
Ameloblastic fibroma

Our case

Radicular cyst
Non-odontogenic tumor

Central giant cell granuloma
Central giant cell granuloma

- Nonneoplastic lesion
- Age: 60% before 60 y/o
- Sex: Female
- Site: 70% arise in mandible, more common in anterior portion
- Sign & symptom: No symptom, painless bony expansion
- X-ray finding: Small $\rightarrow$ unilocular
  - Large $\rightarrow$ Multilocular
<table>
<thead>
<tr>
<th>Our case</th>
<th>Central giant cell granuloma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
</tr>
<tr>
<td>Age</td>
<td>16y/o</td>
</tr>
<tr>
<td>Symptom</td>
<td>Swelling mass over his left lower vestibule area and the nearby teeth</td>
</tr>
<tr>
<td>Site</td>
<td>Left lower vestibule area and the nearby teeth</td>
</tr>
<tr>
<td>Size</td>
<td>2x2cm</td>
</tr>
<tr>
<td>Shape</td>
<td>Unilocular</td>
</tr>
<tr>
<td>Outline</td>
<td>Well-defined with a regular corticated margin</td>
</tr>
</tbody>
</table>
Central giant cell granuloma

Our case

Central giant cell granuloma
Final Diagnosis

Cyst
Odontogenic keratocyst, left mandibular body

Odontogenic tumor
Ameloblastoma

Non-odontogenic tumor
Central giant cell granuloma
Thanks for your attention