報告者：Intern Group A
指導醫師：陳玉昆 主任
林立民 醫師
及口腔病理科全體醫師

Case report
工作分配

- General data + 醫倫：蕭博元
- DD：楊秉倫、陳育萍
- Discussion：郭俊成
- PPT製作：全體組員
- 報告：全體組員
- 統整：楊秉倫
General data

- Name: 郭 O O
- Sex: Male
- Age: 73 y/o
- Native: 高雄市
- Marital status: Married
- Attending staff: O O O O
- First visit: 103/05/28
Chief Complaint

- Referred from ENT Dept. due to a mass over R’t palatal area by self-palapation found in 103/05/10
Present Illness

This 73 y/o male found a mass over R’t hard palatal area by self-palapation in 103/05/10 and went to ENT dept. for treatment. He received a biopsy at 103/5/19 and the H-P report’s diagnosis was odontogenic tumor. Therefore, ENT Dr referred the P’t to OS for further treatment.
Present Illness

103/05/10
- A mass over R’t hard palate was found

103/05/19 ENT
- Received a biopsy
- H-P report: squamous odontogenic tumor, ameloblastoma

103/05/28 OS
- Referred from ENT for treatment. 由於病人目前剛接受心臟手術2個月, 且有服用抗凝血劑, 建議6個月後再考慮手術, 並要求協助複製O O醫院病歷資料提供全身麻醉以及手術過程參考。
- Panorex taking
Present Illness

103/07/05

- 病人與兒子帶來O O醫院心臟科醫師的評估報告, 證明藥物 coumadin 已停止使用 (from 103/06/26 ~ now)
- Patient found the mass was growing up and asked for OP arrangement
- Arrange OP(WE+ stent fixation + Terudermis) on 103/7/18
- GA routine
Past medical history

- Underlying disease (+)
  HTN, valvular heart disease and severe aortic root dilatation

- Hospitalization (+) aortic valve replacement, coronary revascularization, ascending aortic reconstruction (103/03)

- Surgery under GA (+)

- Allergy: Denied
Personal History

- **Past Dental History**
  - General routine dental treatment

- **Attitude to dental treatment**: co-operative

- **Risk factors related to malignancy**
  - Alcohol drinking: (-)
  - Betel quid chewing: (-)
  - Cigarette smoking: (+)

- **Special oral habits**: Denied

- **Irritation**: Denied
Extraoral examination

- Facial asymmetry (+)
- MMO=55mm
Intraoral examination

- A nodule on R’t side of palatal opposed to teeth 25,26,27
- Size: 2.5X2.0cm
- Surface: Smooth
- Consistency: Soft to firm
- Color: Pink
- Dome-shaped
- Sessile based
- Pain (-)
- Tenderness (-)
- Central erosive surface (biopsy site:0.3 x 0.3cm)

103/07/05
103/05/28

- Tooth missing: 34, 46
- Prosthesis: 45X47, 33X35 36
- Restoration: 13, 14, 15, 22
There is a homogeneous, well enhanced soft tissue lesion at the right hard palate. The neck anatomical spaces are essentially clear and preserved.

The trachea is patent without foreign body.

The bony structure is intact.

No regional lymph node enlargement could be identified.
Impression:
A soft tissue tumor at the right hard palate without bony erosion.
(pathology: odontogenic tumor)
Impression:
1) Cardiomegaly
2) Atherosclerosis of tortuous and dilated aorta
3) Thoracolumbar spondylosis
4) S/P sternotomy and cardiac valve replacement
竇性心博過緩
Working Diagnosis
Working diagnosis

- Intrabony or peripheral?
- Inflammation, cyst, or neoplasm?
- Benign or malignant?
## Intrabony or peripheral

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Intrabony</th>
<th>Peripheral</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mucosal lesion</strong></td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Bone expansion</strong></td>
<td>-</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Cortical bone destruction</strong></td>
<td>-</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Consistency</strong></td>
<td>Firm</td>
<td>Hard</td>
<td>Soft, firm, rubbery...</td>
</tr>
</tbody>
</table>

→Our case is a **peripheral lesion**
### Inflammation or neoplasm

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Inflammation</th>
<th>Neoplasm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regress or progress</td>
<td>Progress</td>
<td>Regress</td>
<td>Progress</td>
</tr>
<tr>
<td>Symptom</td>
<td>-</td>
<td>+</td>
<td>+/-</td>
</tr>
<tr>
<td>Growth rate</td>
<td>Months, years</td>
<td>Hours, days, weeks</td>
<td>Weeks, months, years</td>
</tr>
<tr>
<td>Lymph node enlarge</td>
<td>-</td>
<td>+</td>
<td>+/-</td>
</tr>
<tr>
<td>Tenderness</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Fluctuation</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

→Our case is not an inflammation, but a **neoplasm**.
# Benign or malignant

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Benign</th>
<th>Malignant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Border</strong></td>
<td>Well defined</td>
<td>Well defined</td>
<td>Poor defined</td>
</tr>
<tr>
<td><strong>Destruction of cortical margin</strong></td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Pain</strong></td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Induration</strong></td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Swelling with intact epithelium</strong></td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td><strong>Progress</strong></td>
<td>Slow</td>
<td>Slow</td>
<td>Fast</td>
</tr>
<tr>
<td><strong>Metastasis</strong></td>
<td>Unknown</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Lymphadenopathy</strong></td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

→Our case is a **benign tumor**
Lesion could be come from

1. **Epithelium** (surface deffirentiation→X)
2. **Blood vessel** (redness,young→X)
3. Connective tissue
4. Minor salivary gland
5. Nerve

P.252,Wheater’s Functional Histology A Text and Colour Atlas
Differential diagnosis
## Pleomorphic adenoma

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Pleomorphic adenoma</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>73 y/o</td>
<td>30~60 y/o</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>M</td>
<td>Slight F</td>
</tr>
<tr>
<td><strong>Site</strong></td>
<td>Hard palate</td>
<td>50% minor salivary gland, hard palate</td>
</tr>
<tr>
<td><strong>Surface</strong></td>
<td>Smooth</td>
<td>Smooth</td>
</tr>
<tr>
<td><strong>Shape</strong></td>
<td>Sessile, dome-shape</td>
<td>Sessile, Dome-shape</td>
</tr>
<tr>
<td><strong>Symptom</strong></td>
<td>Painless</td>
<td>Painless</td>
</tr>
<tr>
<td><strong>Tenderness</strong></td>
<td>Soft to firm</td>
<td>Firm</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Pink</td>
<td>Pink</td>
</tr>
</tbody>
</table>

P.477~480 in Oral and Maxillofacial Pathology, third edition
# Fibroma

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Fibroma</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>73 y/o</td>
<td>40~60 y/o</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td><strong>Site</strong></td>
<td>Hard palate</td>
<td>Buccal mucosa, anywhere</td>
</tr>
<tr>
<td><strong>Surface</strong></td>
<td>Smooth</td>
<td>Smooth</td>
</tr>
<tr>
<td><strong>Shape</strong></td>
<td>Sessile, dome-shape</td>
<td>Sessile, Nodule</td>
</tr>
<tr>
<td><strong>Symptom</strong></td>
<td>Painless</td>
<td>Painless</td>
</tr>
<tr>
<td><strong>Tenderness</strong></td>
<td>Soft to firm</td>
<td>Firm</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Pink</td>
<td>Pink</td>
</tr>
</tbody>
</table>

P.507~509 in Oral and Maxillofacial Pathology, third edition
## Palisaded encapsulated neuroma

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Palisaded encapsulated neuroma</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>73 y/o</td>
<td>50~70 y/o</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>M</td>
<td></td>
</tr>
<tr>
<td><strong>Site</strong></td>
<td>Hard palate</td>
<td>Palate</td>
</tr>
<tr>
<td><strong>Surface</strong></td>
<td>Smooth</td>
<td>Smooth</td>
</tr>
<tr>
<td><strong>Shape</strong></td>
<td>Sessile, dome-shape</td>
<td>Nodule</td>
</tr>
<tr>
<td><strong>Symptom</strong></td>
<td>Painless</td>
<td>Painless</td>
</tr>
<tr>
<td><strong>Tenderness</strong></td>
<td>Soft to firm</td>
<td>Firm</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Pink</td>
<td>Pink</td>
</tr>
</tbody>
</table>
# Oral focal muconosis

<table>
<thead>
<tr>
<th></th>
<th>Our case</th>
<th>Oral focal muconosis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>73 y/o</td>
<td>Young age</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td><strong>Site</strong></td>
<td>Hard palate</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Gingiva (3/4) 2&lt;sup&gt;nd&lt;/sup&gt; Hard palate</td>
</tr>
<tr>
<td><strong>Surface</strong></td>
<td>Smooth</td>
<td>Smooth</td>
</tr>
<tr>
<td><strong>Shape</strong></td>
<td>Sessile, Dome-shape</td>
<td>Sessile, Nodule</td>
</tr>
<tr>
<td><strong>Symptom</strong></td>
<td>Painless</td>
<td>Painless</td>
</tr>
<tr>
<td><strong>Tenderness</strong></td>
<td>Soft to firm</td>
<td>Unknown</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Pink</td>
<td>Pink</td>
</tr>
</tbody>
</table>

P.525~526 in Oral and Maxillofacial Pathology, third edition
Clinical impression

Pleomorphic adenoma, right hard palate
Treatment course (10/3/7/18)

◊ Surgery

1. Routine patient identification check and time out
2. Patient was put in supine position, GA with NETT intubation
3. Routine aseptic and OMS draping procedures were done
4. Prophylactic antibiotic: Cefazolin (1g) 1 vial + Aqdest 20 ml IV was injected.
5. Throat pack in and OP started
6. Excision of right palate soft tissue tumor
Surgery

7. Copious N/S and antibiotic irrigation (Cefazolin(1g) 1 vial + Aq-dest 20 ml)
8. Palatal stent try-in and adjustment
9. Terudermis(2.5x2.5) repair, suture with vicryl 4-0
10. Soft-liner dressing, compression with palatal stent
11. Palatal stent fixation with #24 wire over tooth 15, 17, 24, 26
12. Copious N/S irrigation
13. Throat pack out and OP ended.
Treatment course (103/7/18)

Pre-OP

Post-OP
Histopathology report (103/7/22)

臨床診斷：Benign neoplasm
Pathologic diagnosis:
Oral cavity, hard palate, right, excision, pleomorphic adenoma

Gross Examination:
The specimen submitted consists of 1 soft tissue fragment in 1 bag, measuring 3.0 x 2.0 x 1.2 cm in size, in fresh state. Grossly, it is white brown in color and firm in consistency.

All for section. Jar 0.

Microscopic Examination:
The slide contains two identical groups of irregular-shaped soft tissue specimens.
Microscopically, it shows pleomorphic adenoma.
Treatment course

103/7/26
- Wound condition: stable
- Explained H-P report
- Reinforce home care

103/8/2
- Wound condition: stable
- Local treatment with remove palatal stent
- Reinforce home care
Case Report
Diagnostic Challenge of a Deep Minor Salivary Gland Neoplasm
Wagner VP et al., Case Reports in Otolaryngology 2014; 608267
Introduction

- **Salivary gland tumors** unusual oral conditions that generated considerable interest due to their heterogeneous histology, grade of malignancy, and clinical behavior.

- **Accurate preoperative diagnosis** adequate treatment and open biopsy followed by histopathological analysis.
Introduction

Fine-needle aspiration cytology (FNAC) and Core needle biopsy (CNB) have gained widespread popularity for tissue sampling in order to achieve a definitive diagnosis as they both represent less invasive and inexpensive techniques.
Introduction

- Fine-needle aspiration cytology (FNAC)
  - 21- to 27-gauge needles
  - Safer and less traumatic
  - Clusters of cells
  - High false negative rate
  - Difficulty to diagnosis (cytopathologist)
Introduction

- **Core needle biopsy (CNB)**
  - 14- to 17-gauge needles
  - Safer and less traumatic
  - Automated biopsy gun
  - Pieces of tissue
  - High accuracy
Case Presentation

- A 60-year-old Caucasian female patient presented with a painless swelling in the soft palate, breathing and swallowing difficulties, and suffocation feeling.
- Clinical examination revealed that the lesion was located mostly in the right side, extending from the limit between the hard and soft palate and continuing to the oropharynx.
Case Presentation

- Clinical and imaging aspects - a hypothesis of benign X malignant salivary gland tumor
Case Presentation

- Incisional biopsy and histopathological examination is - normal mucosa
Case Presentation

- Otorhinolaryngologist team was consulted and the decision was made to perform a CNB.
- The histopathological analysis of the sample revealed pleomorphic adenoma.
Discussion

- **Salivary gland tumors** - most heterogeneous and usually misdiagnosed
- **salivary gland malignancy** - increases in inverse proportion to the size of the gland
- Unlike major salivary gland tumors, the **majority** of minor salivary gland tumors are **malignant**
## Discussion

<table>
<thead>
<tr>
<th></th>
<th>Open biopsy</th>
<th>CNB</th>
<th>FNAC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantage</strong></td>
<td>Gold standard to diagnosis</td>
<td>Cheaper, high accurate, can use in deep lesion</td>
<td>Cheaper, can use in cystic content</td>
</tr>
<tr>
<td><strong>Disadvantage</strong></td>
<td>Difficulty in deep lesion expensive</td>
<td>Difficulties in cystic content and small lesion (less than 1cm)</td>
<td>Less accurate</td>
</tr>
</tbody>
</table>
Discussion

In major salivary glands, open biopsy is no longer justified due to the
1. High risk of tumor seeding
2. Facial nerve injury
3. Facial scarring
4. Fistula formation
Discussion

ividad of supplying a specific diagnose in head and neck tumors

<table>
<thead>
<tr>
<th></th>
<th>CNB</th>
<th>FNAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct accuracy</td>
<td>90%</td>
<td>66%</td>
</tr>
</tbody>
</table>

The study showed that CNB of salivary gland lesions (only major salivary gland)

<table>
<thead>
<tr>
<th></th>
<th>True salivary glands neoplasms</th>
<th>Malignancy in salivary glands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive predictive</td>
<td>100%</td>
<td>98%</td>
</tr>
</tbody>
</table>
Summary

- Open biopsy remains the gold standard for minor salivary gland lesions
- However, the purpose for the diagnosis of tumors situated in greater depth of tissues. CNB represents a safe technique and at the present case was able to supply a correct diagnose, confirmed in the surgical specimen.
醫學倫理討論
生命的神聖性(Sanctity of life)：
行善原則(Beneficence)：醫師要盡其所能延長病人之生命且減輕病人之痛苦。
誠信原則(Veracity)：醫師對其病人有「以誠信相對待」的義務。
自主原則(Autonomy)：病患對其己身之診療決定的自主權必須得到醫師的尊重。
不傷害原則(Nonmaleficence)：醫師要盡其所能避免病人承受不必要的身心傷害。
保密原則(Confidentiality)：醫師對病人的病情負有保密的責任。
公義原則(Justice)：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。
生命的神圣性
行善原則

做了Excision 後是否有減輕病人的疼痛感？或是使病人更不舒服？
 whichever way, has it improved or made the patient more uncomfortable?
→有完整去除病灶區域並拍照記錄術後情形。
並告知術後傷口會疼痛，但持續癒合後疼痛會逐漸緩解
誠信原則

对于患者的疾病**严重程度**是否有确实地通知，尽到告知的义务？

是否清楚的向病人说明清楚疾病病程、治疗计划、预后、风险？

→皆以已告知病人后，经同意才进行手术。
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地選擇治療計畫？
→病人及家屬選擇並同意醫師的建議。

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？
→已充分說明並與家屬溝通。
不傷害原則

一、是否有先完整瞭解病人的病史？
→治療前有完整蒐集病史資料，並與病患溝通後擬定進一步的治療計畫

二、手術過程中，是否有造成不必要的醫源性的傷害？
→沒有不必要醫源性傷害。
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
手術的必要性？
→pleomorphic adenoma最佳的治療方式是sugical excision，將病灶完整的清除(enucleation)才能將復發率(recurrence rate)降到最低。
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
References

- P.477~480, 507~509, 516~517, 525~526 in Oral and Maxillofacial Pathology, third edition
- P. 252, Wheater’s Functional Histology A Text and Colour Atlas
- Diagnostic Challenge of a Deep Minor Salivary Gland Neoplasm. Case Rep Otolaryngol 608267
THANK YOU FOR YOUR ATTENTION!