

口腔診斷學

case report #3

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Part 1

Basic Information

General Data

- Name: XXX
- Sex: male
- Age: 52 y/o
- Native: 屏東
- Martial Status: married
- Occupation: 工
- Attending V.S.: ?
- First Visit: ?

Chief Complaint

- Gingival erosion over left upper anterior labial surface and left lower posterior buccal surface ◦



Present Illness

- The patient had an upper removable partial denture and teeth 36, 37 metal crown preparation for 10+ years.
- About three weeks ago, this 52 y/o male suffered from gingival ulceration over the buccal mucosa of teeth 36, 37 and over the labial and palatal mucosa of teeth 21, 23.
- These three lesion sites had not suffered from occlusal trauma previously but dull pain resided.

Past History

- Past Medical History:
 - Heart disease (+)
 - Hypertension (+)
 - Hospitalization (+): bone trauma
 - Liver disease, neoplasm, thyroid disease, tuberculosis, renal disease, DM, blood disorder: unknown
 - Drug allergy: acetaminophen, cephalosporin, soma, panadol (+)

Past History

- Past Dental History
 - Extraction
 - OD, endo
 - Removable partial denture
 - Crown fabrication: 36, 37, 46, 47
 - Attitude toward dental tx: unknown

Personal History

- Risk factors related to malignancy:
 - Alcohol: (-)
 - Betal quid: (-)
 - Cigarette: (-)
- Denied any personal habit

Family History

- Hereditary disease: denied

Extra-oral examination

- unknown

Intra-oral examination(1)

Upper left buccal side

- Region:
21 23
- Surface:
**Ulcerative
Crater-like**
- The adjacent gingiva:
swelling red
- Size
2x2 cm
- Consistency: **rubbery**
- Pain: -
- Tenderness: +



Intra-oral examination(2)

Palatal side

- Region:
11 21 22 23
- Surface:
**ulcerative
crater-like**
- Adjacent gingiva:
swelling red
- Size
About 4x2cm
- Consistency: **rubbery**
- Pain: **+**
- Tenderness: **-**



Intra-oral examination(3)

Lower left side

•Region:

36 37

•Surface:

**Ulcerative
Crater-like**

•Adjacent gingiva:

swelling red

•Gingival recession:

35

•Size

3x2.5cm

Consistency: **rubbery to firm**

Pain: **+**

Tenderness: **+**

Induration: **+**



Intra-oral examination(4)

- Fetid odor
- Dental finding:
 1. Missing teeth: 14~18, 22, 24~28 , 34, 36, 46, 48
 2. C & B: 33x35x37 44 45x47
 3. Residual root: 32

Radiographic examination (panoramic film)



Dental finding:

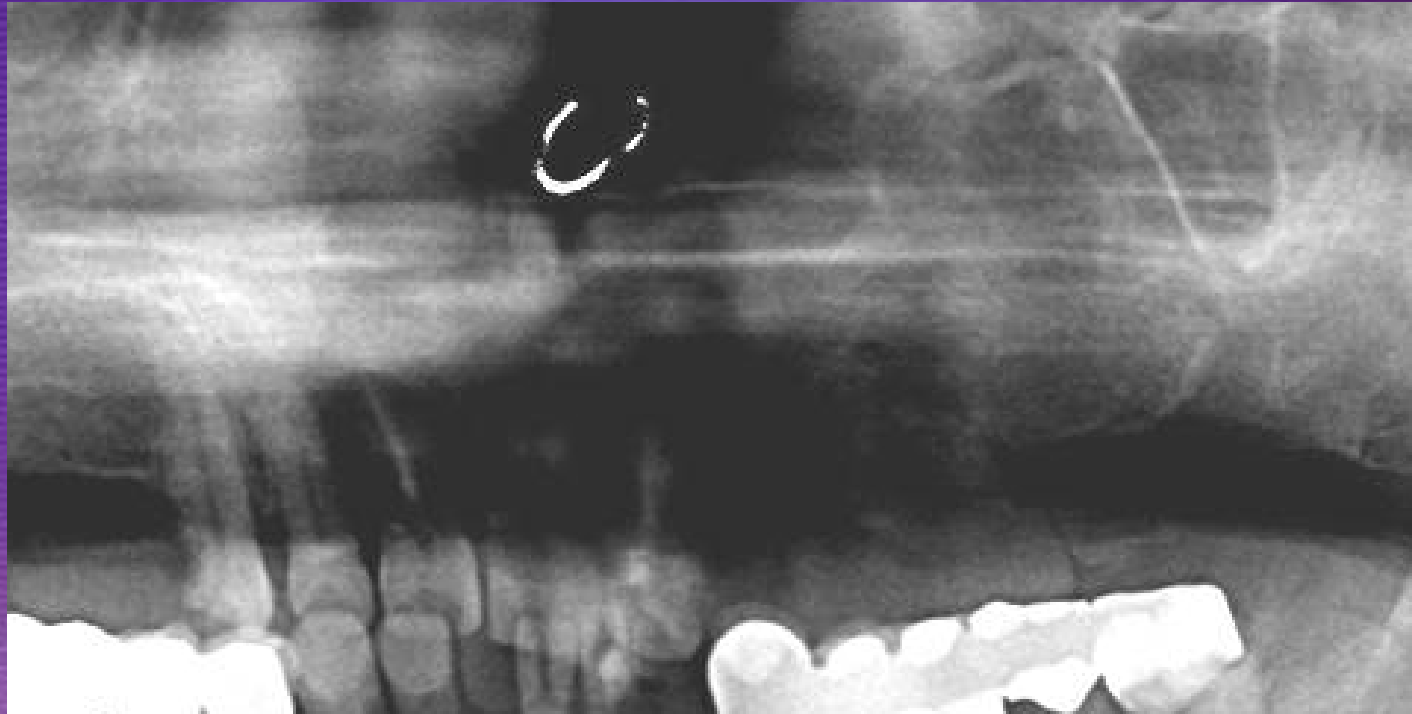
1. Missing teeth: 14~18, 22, 24~28, 34, 36, 46, 48
2. C & B: 33x35x37 44 45x47
3. endo: 11 22 44 45
4. Root resorption: 37
5. unerupted: 38
6. Residual root: 32

Radiographic examination(2)

There is a well-defined unilocular, irregular-shaped radiolucent shadow without corticated margin over left mandible body area, extending from distal side of tooth 35 to mesial side of tooth 37 and from alveolar crest down to $\frac{1}{2}$ height of mandible body, measuring approximately 3x2.5cm in diameter. External root resorption of tooth 37 is observed.



Radiographic examination(3)



An ill-defined homogeneous radiolucency with irregular border is over anterior region of maxillary, extending from mesial side of tooth 12 to distal side of premolar region and from alveolar crest to hard palate, measuring approximately 6x3cm .

Part 2

Working Diagnosis

Working Diagnosis

Lesion Duration : 2~3 weeks

- **Maxillae & mandible multiple lesion**
- **Ulceration surface(+)**
- **Pain (-) / (+)**
- **Tenderness (+)**
- **ill-defined RL lesion**
- **Root resorption**
- **Bone perforation**

Working diagnosis

***Inflammation? Cyst? Neoplasm?**

Fever or local heat: unknown

Duration: 2~3 weeks

Ill-defined radiolucent shadow

Pain: (+)/(-)

rule out cyst !

Tenderness (+)/(-)

Inflammation / Neoplasm

Working diagnosis

Inflammation & Neoplasm

- ill-defined radiolucent shadow
=> **Malignant neoplasm**

Bony lesion ?

- Intra-bony(central) or Peripheral type?
- * pressure type radiolucent shadow.



Peripheral type

Working diagnosis

Lesion Information:

1. Malignant neoplasm
 - ill-defined radiolucent shadow
2. Peripheral bony lesion
 - pressure type radiolucency
3. Multiple lesion
 - Maxillae & mandible
4. Ulcersation (+)

Working Diagnosis

Multiple lesions & ill- defined radiolucencies

1. Inflammation & Infection of bone
2. Osteolytic malignancy
3. Non-Hodgkin's Lymphoma
4. Metastatic tumor

(male :lung, prostate, kidney, bone, adrenal gland)

*Rule out odontogenic tumor. –Peripheral bony lesion.

Ulcer

Short term
Shallow lesion

* Maybe Pain (+) ,
*Exception : SCC ,

Persistent
**extensive border
& base**
regional lymphadenitis(+)
Peripheral malignancies.

Persistent

Persistent Ulcer Differential list

- Traumatic ulcer
- Ulcer from odontogenic infection
- SCC
- Ulcer secondary to systemic disease
- Metastatic tumor
- Ulcer in human immunodeficiency
- Systemic mycosis
- Chancre
- Gumma
- Non-Hodgkin's Lymphoma
- Leiomyosarcoma

Working diagnosis

*Since there is not enough data showing lymphadenopathy and Pt's physical condition. Our differential diagnosis are:

- Non-Hodgkin's Lymphoma
- TB
- SCC
- Leiomyosarcoma
- Metastatic tumor

Part 3

Differential Diagnosis

Differential Diagnosis 1

Non-Hodgkin's Lymphoma

Non-Hodgkin's Lymphoma

	Non-Hodgkin's Lymphoma	Our case
Age	adults	52 years old
Gender	Not specific	Male
Site	Buccal vestibule Posterior hard palate gingiva	1. Labial mucosa of 21 + 23 2. Palatal side of 11 + 21 3. Buccal gingiva of 36 + 37
Symptom	Tenderness(-) Diffused swelling Ulceration Bone pain	Pain(+)(-) Tenderness(+)(-) Ulcerative surface, crater-like appearance

Non-Hodgkin's Lymphoma

	Non-Hodgkin's Lymphoma	Our case
Margin	Ill-defined, ragged	Well-defined without corticated margin in mandibular post. lesion, ill-defined margin in maxillary ant. lesion
X-ray feature	Diffused lesions	Multiple lesions unilocular (in left mandibular posterior interdental papilla)
Density	radiolucence	Radiolucence

Non-Hodgkin's Lymphoma

	Non-Hodgkin's Lymphoma	Our case
Bone expansion	(+)	(-)
Effects on surrounding structures		Root resorption of 37

Differential Diagnosis 2

Tuberculosis

Tuberculosis

- **Primary tuberculosis:**
 - **previously unexposed people** and almost always involves the **lungs**
 - usually **asymptomatic**, occasionally **fever** and **pleural effusion**
 - **localized, fibrocalcified nodule** at the initial site of involvement



Tuberculosis

- **secondary tuberculosis:**
 - **Reinfection or reactivation of the primary infection**
 - **Associated with compromised host defenses, old age, poverty, crowded living condition, AIDS**

Tuberculosis

- The most common site of head and neck involvement:
 - Cervical lymph node (*scrofula*)
 - Larynx
 - Middle ear
- Oral lesion: uncommon
 - Hematogeneous route or exposure to infected sputum

Tuberculosis

	Tuberculosis	Our case
Age	Non-specific	52 years old
Gender	No predilection	Male
Site	<u>Primary</u> oral tuberculosis: Gingiva, mucobuccal fold, areas of inflammation adjacent to teeth or in extraction sites <u>Secondary</u> oral tuberculosis: tongue (most), palate, lip	<ol style="list-style-type: none">1. Labial mucosa of 21 + 232. Palatal side of 11 + 213. Buccal gingiva of 36 + 37

Tuberculosis

	Tuberculosis	Our case
Symptom	Irregular, superficial or deep, painful ulcer, increase slowly in size Nodular, glandular, or (rarely) firm leukoplakic area	Pain(+)(-) Tenderness(+)(-) Ulcerative surface, crater-like appearance
X-ray feature	Diffuse involvement of the maxilla or mandible may occur	Multiple lesions unilocular (in left mandibular posterior interdental papilla)
Density	Radiolucence	Radiolucence
Margin	Ill-defined	Well-defined without corticated margin in mandibular post. lesion, ill-defined margin in maxillary ant. lesion

Differential Diagnosis 3

Squamous cell carcinoma

Squamous cell carcinoma SCC

- Approximately 94% of all oral malignancies are SCC
- 6th most common cancer in males
- 12th most common cancer in females

Squamous cell carcinoma SCC

- It is a malignant tumor of epithelium that shows squamous cell differentiation
- may occur in many different organs, including the skin, mouth, esophagus, prostate, lungs, and cervix

Squamous cell carcinoma SCC

- Varied clinical presentation:
 - Exophytic (mass-forming; fungating; papillary; verruciform)
 - Endophytic (invasive, burrowing, ulcerated)
 - Leukoplakic (white patch)
 - Erythroplakic (red patch)
 - Erythroleukoplakic (combined red-and-white patch)

Squamous cell carcinoma SCC

	SCC	Our case
Age	Middle age group	52 years old
Gender	M : F = 3 : 1 (male dominant)	Male
Site	Tongue, lip, oral floor, soft palate, gingiva, buccal mucosa, labial mucosa, hard palate	<ol style="list-style-type: none">1. Labial mucosa of 21 + 232. Palatal side of 11 + 213. Buccal gingiva of 36 + 37

Squamous cell carcinoma SCC

Endophytic

- Depressed area with a red or white border of normal,



erated, central
der of normal,

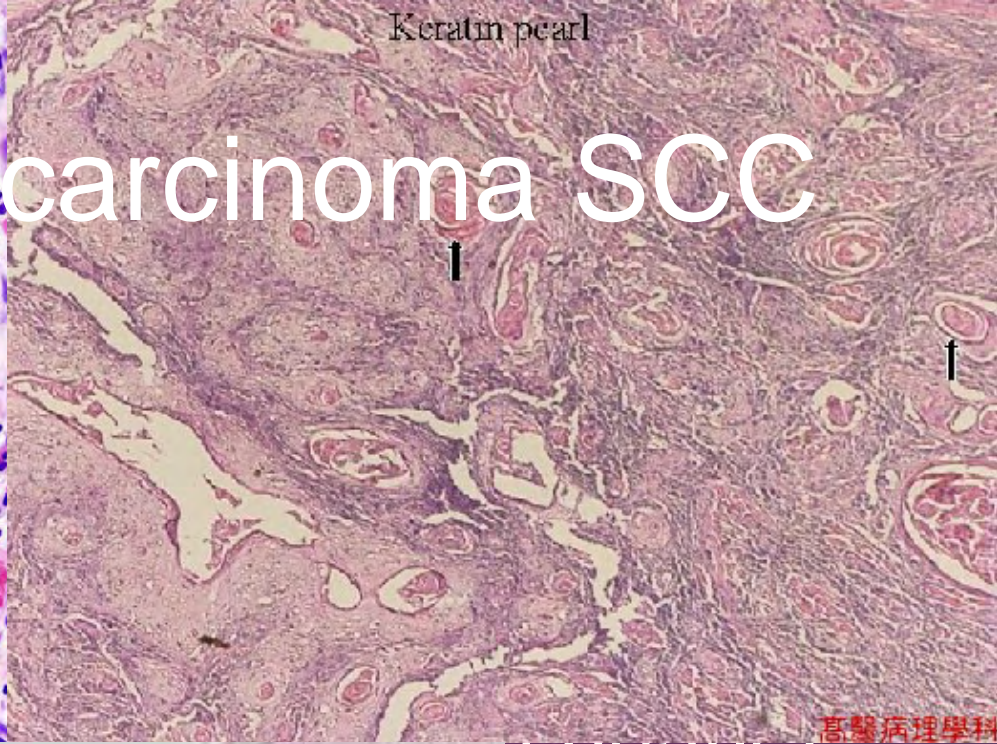
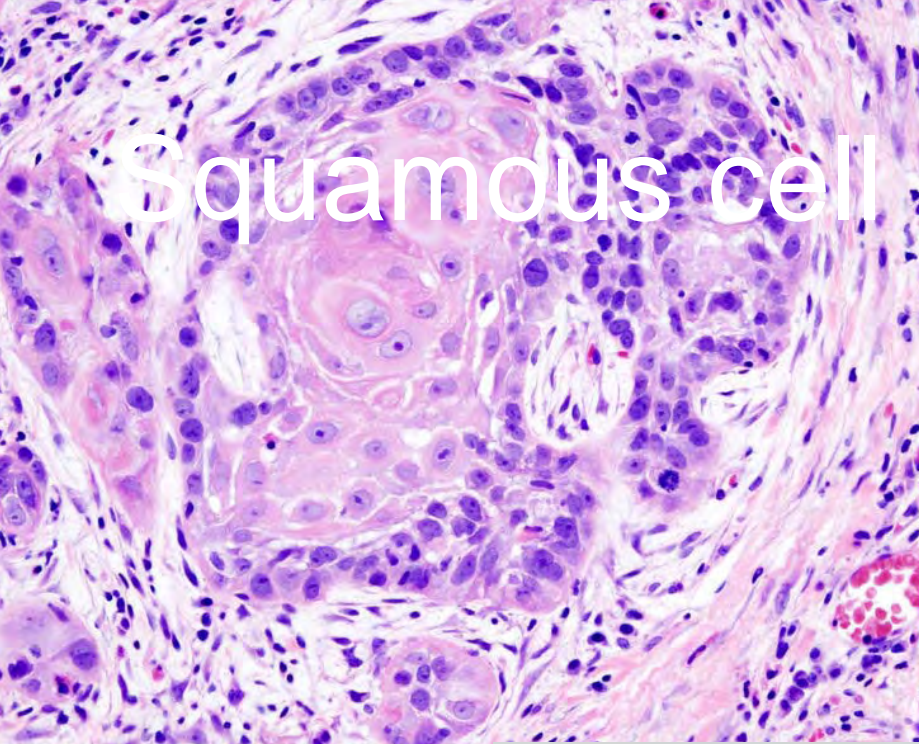


Squamous cell carcinoma SCC

X ray finding

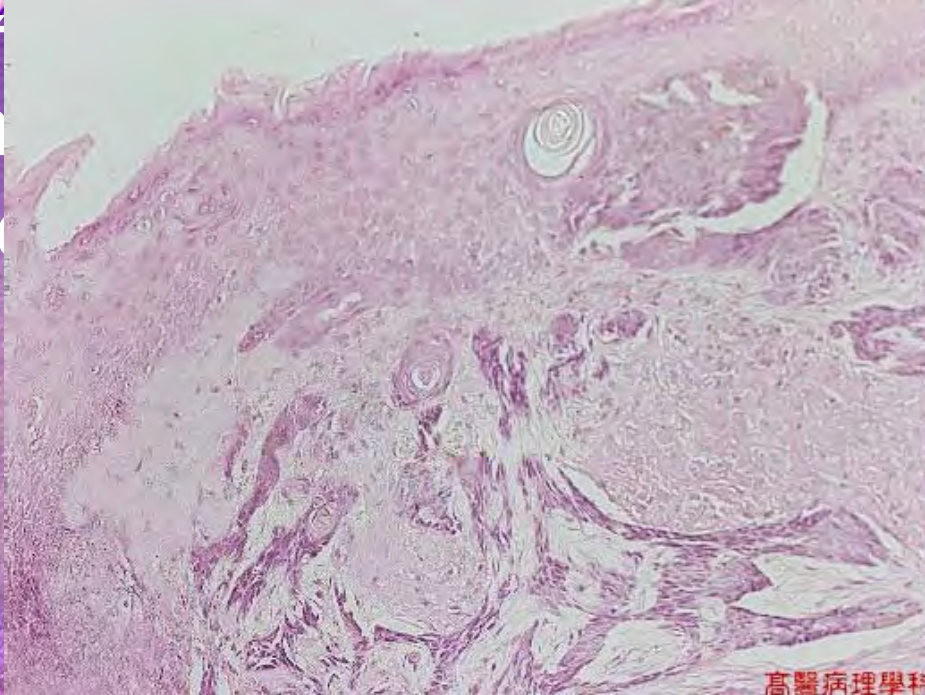
- Destruction of underlying bone
- May be painful or completely painless
- “Moth-eaten” radiolucency with ill-defined or ragged margins

Squamous cell carcinoma SCC



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- Invasion into subcutaneous tissue



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Squamous cell carcinoma SCC

- Etiology
 - The cause is multifactorial
 - Alcohol, Betel nuts, Cigarette (南台灣)
 - Syphilis, immuno-suppression, iron-deficiency, tobacco chewing...etc.

Squamous cell carcinoma SCC

Current case:

- ABC (-) → SCC可能性小
- Radiotherapy (-)
- 肝病 or 肝炎 ----- 不詳
- Neoplasm or Tumor ----- 不詳
- DM ----- 不詳

further examinations

Differential Diagnosis 4

Leiomyosarcoma

Leiomyosarcoma

	Leiomyosarcoma	Our case
Age	Middle-aged	52 years old
Gender	Not specific	Male
Site	Mandibular	1.Labial mucosa of 21 + 23 2.Palatal side of 11 + 21 3.Buccal gingiva of 36 + 37
symptom	Pain Ulceration swelling	Pain(+)(-) Tenderness(+)(-) Ulcerative surface, crater-like appearance

Leiomyosarcoma

	Leiomyosarcoma	Our case
Margin	Not specific	Well-defined without corticated margin in mandibular post. lesion, ill-defined margin in maxillary ant. lesion
X-ray feature	Not specific	Multiple lesions unilocular (in left mandibular posterior interdental papilla)
Density	Not specific	Radiolucence
Bone expansion	Not specific	(-)

Differential Diagnosis 5

Metastatic tumor

Metastatic tumor

- Oral cavity → Uncommon
- Bony → jaw mand>max
- Soft tissue → 50% gingiva 25% tongue

Metastatic tumor

	Metastasis tumor	Our case
Age	middle-aged and older adult	52 years old
Gender	Male	Male
Site	Jaw → mand > max (premolar & molar area) Gingiva > 50% Tongue 25%	1. Labial mucosa of 21 + 23 2. Palatal side of 11 + 21 3. Buccal gingiva of 36 + 37

Metastatic tumor

	Metastasis tumor	Our case
Symptom	Hyperplasia , nodular mass , ulceration , bony destruction , pain , swelling	Pain(+)(-) Tenderness(+)(-) Ulcerative surface , crater-like appearance
Margin	Ill-defined	Well-defined without corticated margin in mandibular post. lesion, ill-defined margin in maxillary ant. lesion
X-ray feature	Solitary, poorly marginal , jaw → moth-eaten Widening of PDL	Multiple lesions unilocular (in left mandibular posterior interdental papilla)

Metastatic tumor

	Metastasis tumor	Our case
density	Radiolucence	Radiolucence
bony expansion	(+)	(-)
root resorption	(?)	(+)
effects on surrounding structure	Adjacent teeth become loosened	Root resorption

Comparisons among D.D.

	Non-Hodgkin's Lymphoma	TB	SCC	Leiomyosarcoma	Metastatic tumor
Age	+	Not specific	+	+	+
Gender	Not specific	Not specific	+	Not specific	+
Site	+	+	+	+	+
Symptom	+	+	+	+	+
Margin	+	+	+	-	+
X-ray features	+	+	+	-	-
Density	+	+	+	-	+
Bone resorption	-	+	+	-	-
Bone expansion	-	-	-	-	-
Others	50% of lymphoma are extranodal	Further medical examination required	Without ABC	Radiographic finding not specific	Further medical examination required

Clinical impression

Non-Hodgkin's Lymphoma, intra-oral, in maxillary anterior palatal mucosa, maxillary anterior labial mucosa of 21,23 and mandibular posterior buccal mucosa of 36, 37.

Need further medical examinations.

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Thanks for your attention!