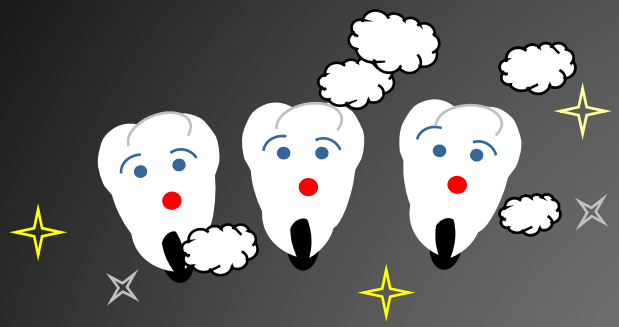


口診seminar
第一組

指導老師：

王文岑醫師、陳玉昆醫師

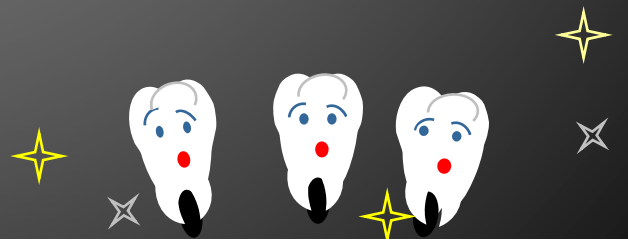
組員：

葉信吟　蔡佩倫　朱沛真　謝勝涵　陳宗恩

龔志揚　王建弦　陳源韻　吳尚恆　郭宗憲

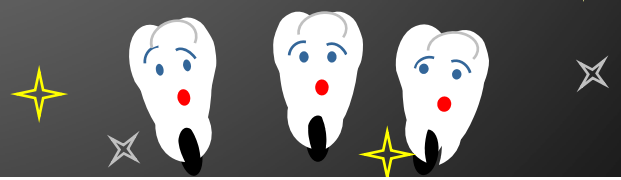
General data

- Name：OOO
- Sex：male
- Age：47
- Occupation：laborer
- Marital status：married



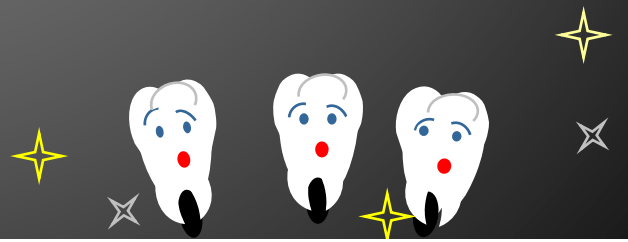
CHIEF COMPLAINT

- An ulcerative lesion over right mouth floor for 2 months



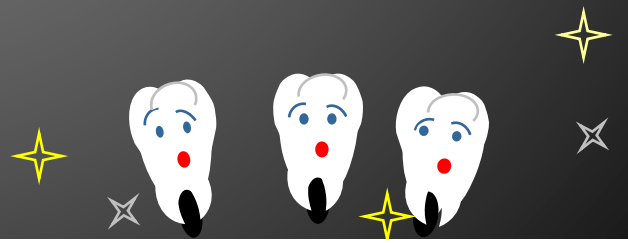
PRESENT ILLNESS

- This 47 y/o male suffered from the above episode for 2 months. He went to Yuan General Hospital for further treatment. After oral examination, he was referred to our OPD for further evaluation and treatment.



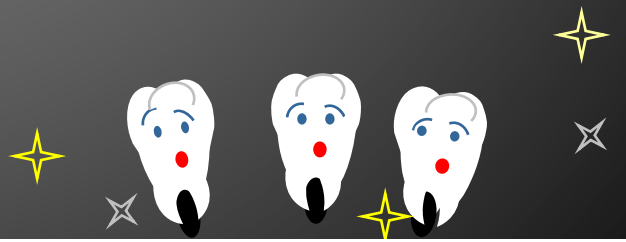
Past Medical History

- Denied any systemic disease
- Denied any drug or food allergy
- Hospitalized for gastric perforation



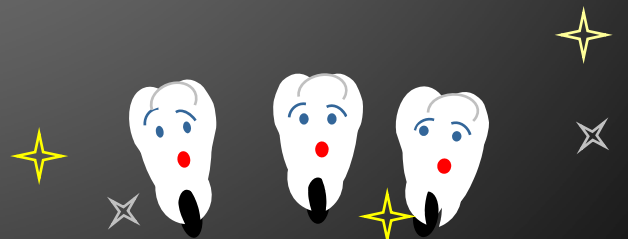
Past Dental History

- Unknown



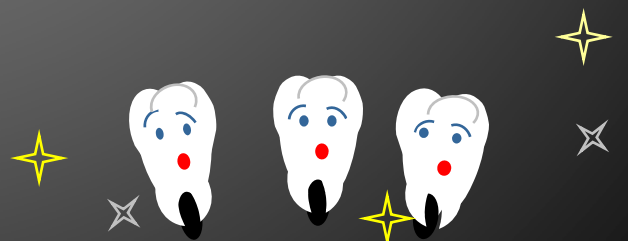
PERSONAL HABITS

- Alcohol：(+) >20years
- Betel quid：(+) 30~40顆/day >20years
- Cigarette：(+) 1.5包/day >20years
- Denied any other oral habit



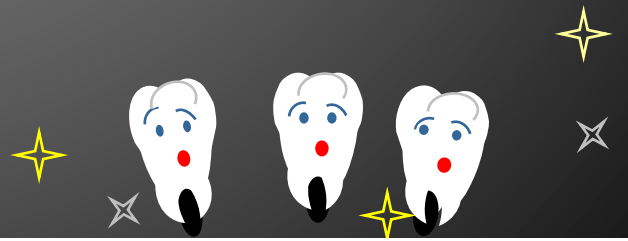
EXTRAORAL EXAMINATION

- Clinical profile：normal



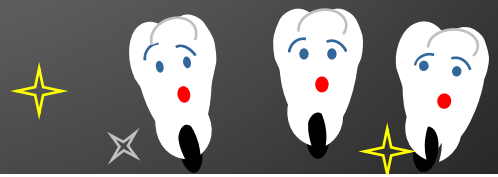
INTRAORAL EXAMINATION

- An ulcerative mass over right floor of mouth
- Measured approximately 2.0x2.0 cm
- Surface：rough
- Base：sessile
- Shape：dome
- Color：red
- Consistency：soft
- Fluctuation：(-)



INTRAORAL EXAMINATION

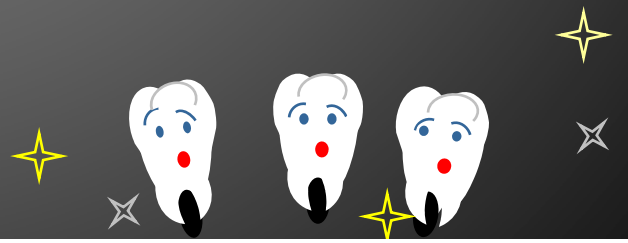
- Mobility：fixed
- Pain：(-)
- Tenderness：(-)
- Induration：(+)
- Lymphadenopathy：(-)
- Food impaction
- Plaque & calculus deposition
- Missing teeth : 27 28 36



INTRAORAL EXAMINATION

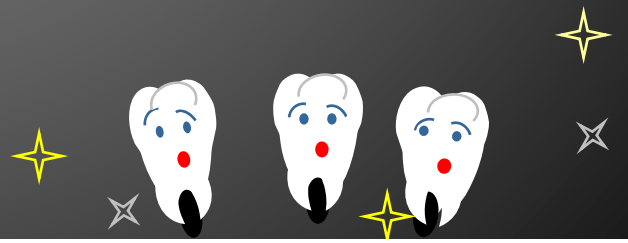
- The buccal gingiva of tooth 44 45 46 turned white
- Leukoplakia at the right lateral border of tongue, approximately 1.0 x 1.0 cm
- Tooth attrition due to betel nut chewing.

INTRAORAL EXAMINATION



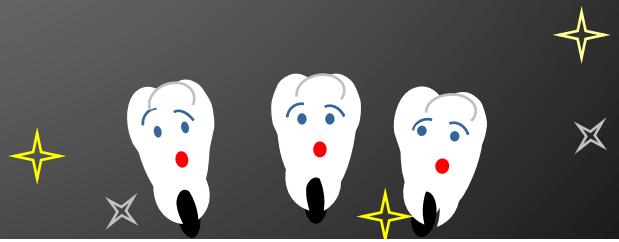
RADIOGRAPHIC & IMAGING EXAMINATION

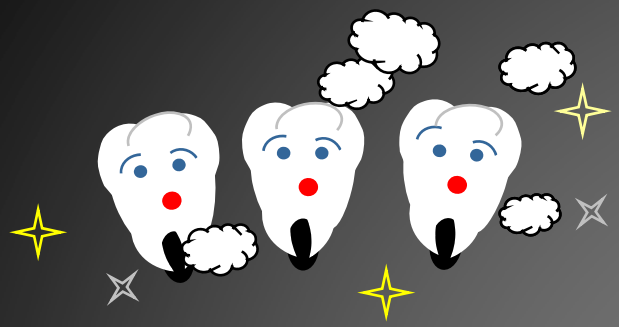
- Unknown



Laboratory Tests & Biopsy

- Unknown





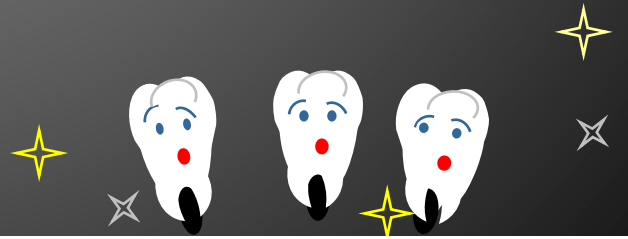
DIFFERENTIAL DIAGNOSIS

STEP ONE .
INFLAMMATION, CYST, OR NEOPLASM

Step 1-1 →

- Pain：(-)
- Tenderness：(-)
- Duration：2 months
- No purulent drainage was presented
- No fever, local heat

→ rule out inflammation

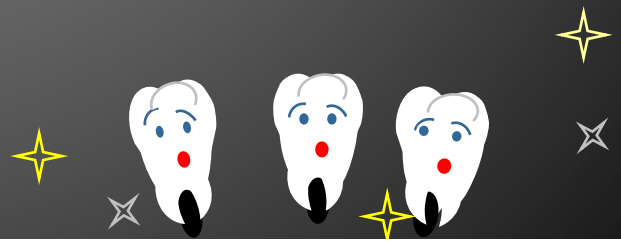


STEP ONE.
INFLAMMATION, CYST, OR NEOPLASM

- ***Step 1-2***
  - Mobility：fixed
  - Fluctuation：(-)

→ rule out cyst

→Neoplasm



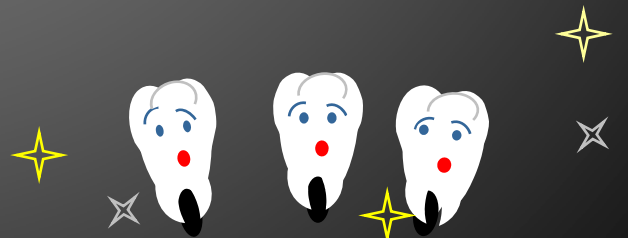
STEP TWO.
BENIGN OR MALIGNANT

Features suggestive of malignancy	*Our case —may be malignant*
1.Induration	1.Induration(+)
2.Fixed to overlying skin or mucosa	2.Fixed to overlying mucosa
3.Ulceration of skin or mucosa	3.Ulceration of mucosa
4.Rapid growth	4.Rapid growth
5.Short duration	5.2 months
6.Pain often severe	6.Pain：(-) Tenderness：(-)
7.Nerve palsy	7.unknown

STEP THREE.
PERIPHERAL OR INTRABONY ORIGIN

- The mass is over mouth floor
  (soft tissue origin)
- Exophytic dome shape mass

→ **Peripheral**



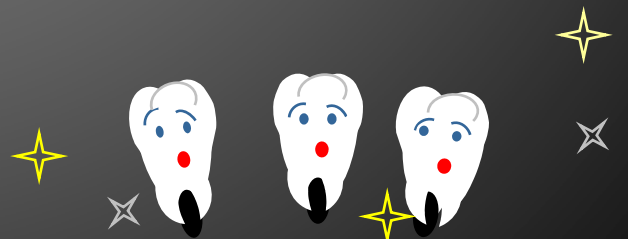
DIFFERENTIAL DIAGNOSIS

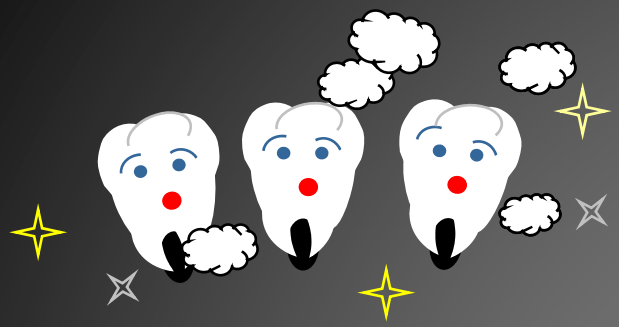
Inflammation **Cyst** **Neoplasm**

Benign **Malignant**

Peripheral malignant neoplasm

Central **Peripheral**

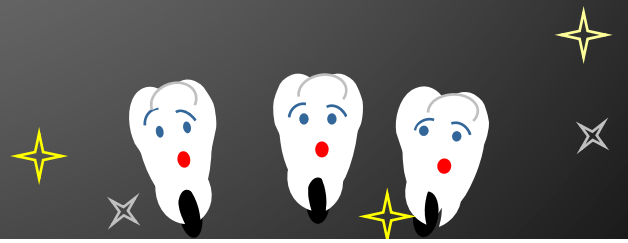




WORKING DIAGNOSIS

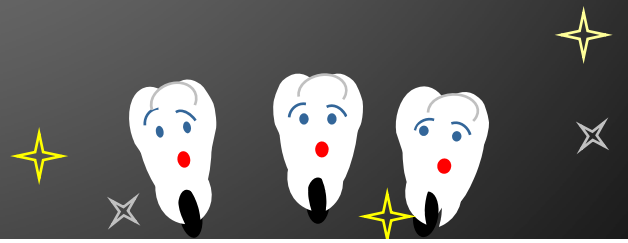
Working diagnosis

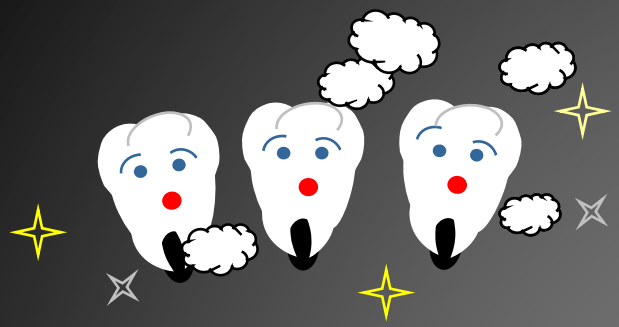
- Epithelial origin
  - →**Squamous cell carcinoma**
  - →**Spindle cell carcinoma**
- Connective tissue origin
  - →**Kaposi's sarcoma(HIV-associated)**
  - →**Fibrosarcoma**



Working diagnosis

- Salivary gland origin
  - →**Mucoepidermoid carcinoma**
  - →**Adenoid cystic carcinoma**
- Metastatic origin
  - →**Metastases to the oral soft tissue**





EPITHELIAL ORIGIN

SQUAMOUS CELL CARCINOMA

- The early lesion may be a painless, shallow ulcer with a velvety red base and a firm, raised border

FIGURE 6-49

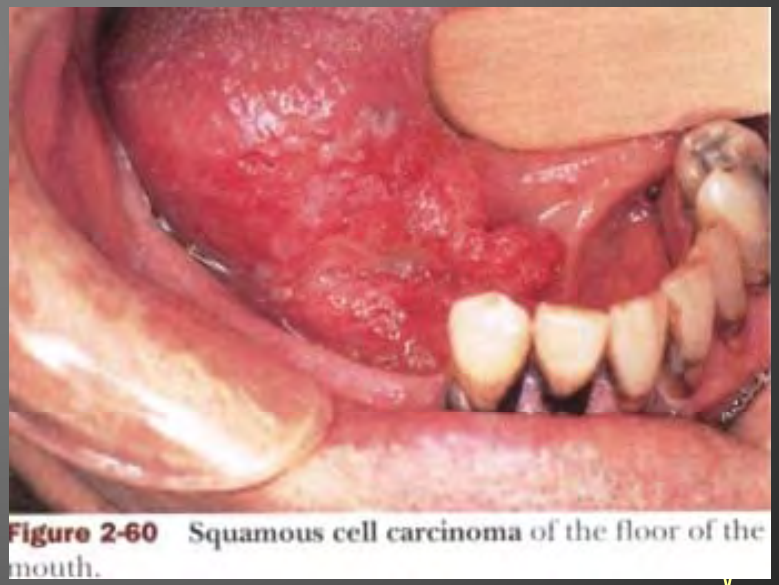
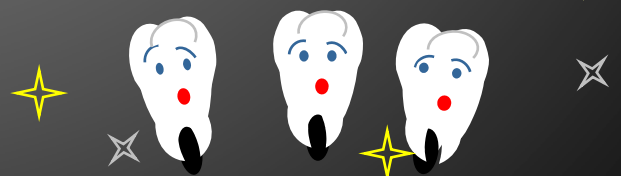


Figure 2-60 **Squamous cell carcinoma** of the floor of the mouth.



SQUAMOUS CELL CARCINOMA

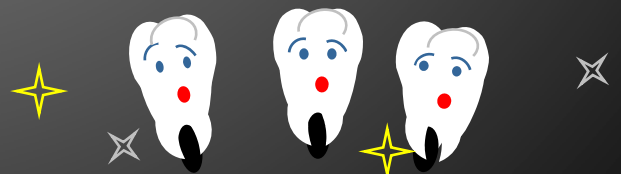
- Exophytic

  (mass-forming , fungating , papillary verruciform , ulcerated)

- Endophytic

  (invasive , burrowing , ulcerated)

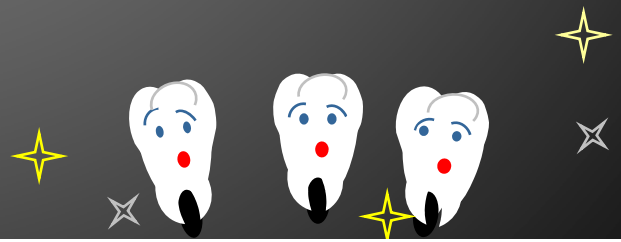
- Leukoplakic(white patch)
- Erythroplakic(red patch)
- Erythroleukoplakic (combined red&white)



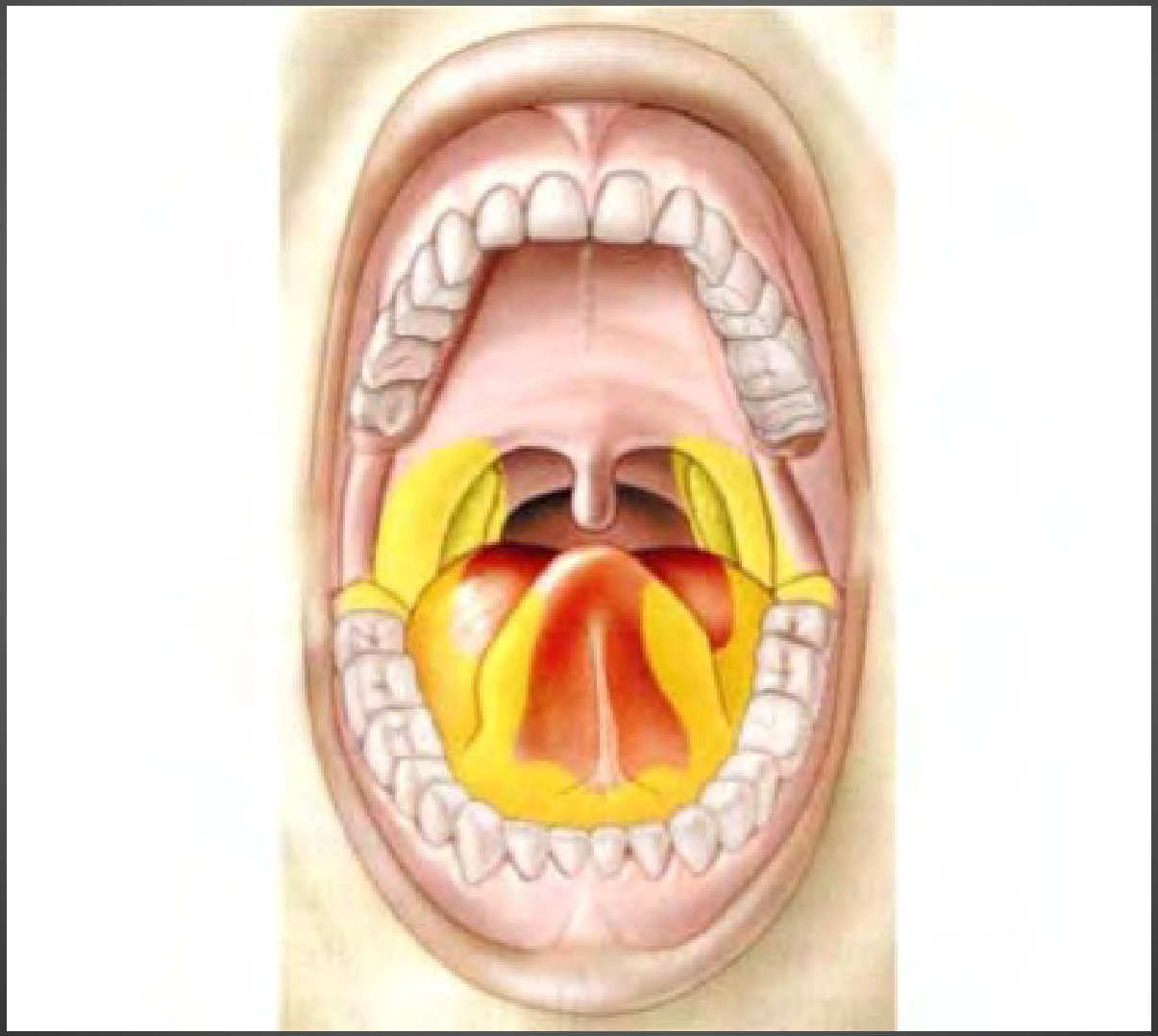
SQUAMOUS CELL CARCINOMA

Figure 2-59 **Early squamous cell carcinoma** of the floor of the mouth.

Figure 2-58 **Early squamous cell carcinoma** of the floor of the mouth.

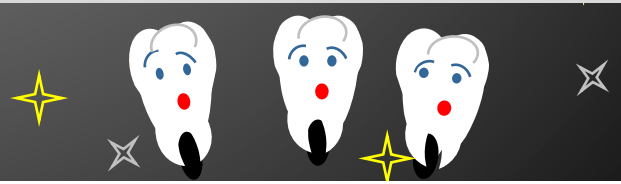


SQUAMOUS CELL CARCINOMA

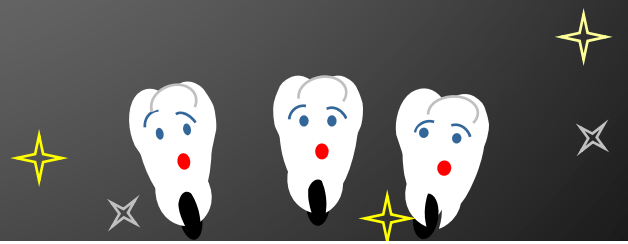


EXOPHYTIC, SQUAMOUS CELL CARCINOMA

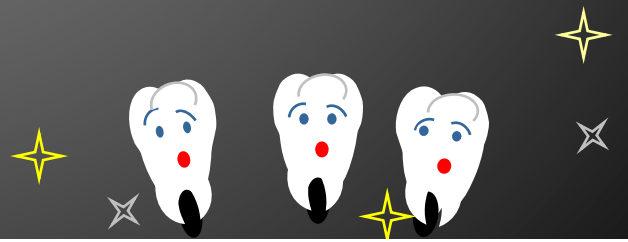
	Squamous Cell Carcinoma	Our Case
Gender	Male>Female	♂
Age	Accidence increased with age	47
Site	lip，tongue，floor or roof of the mouth，buccal mucosa ，soft and hard palate，gum Tongue----most common site **Oral floor----35% intraoral CA , involved much less commonly in female**	Floor of mouth (male)



	Squamous Cell Carcinoma	Our Case
Size	Random	2.0cm x 2.0cm
Surface	Variable	Rough
Base	Broad base	Sessile
Shape	Irregular	Dome
Color	Pink , white, red, white & red	Red
Consistency	Firm	Soft
Fluctuation	(-)	(-)
Pain	Minimal pain during early growing phase	(-)



	Squamous Cell Carcinoma	Our Case
Mobility	Fixed	Fixed
Induration	(+)	(+)
Risk factor	Alcohol(+) Betel quid(+) Smoking(+)	Alcohol(+) Betel quid(+) Smoking(+)
Duration	Often 4~8 month before seeking professional help	2 Month
Ulceration	(+)	(+)



SQUAMOUS CELL CARCINOMA V.S OUR CASE

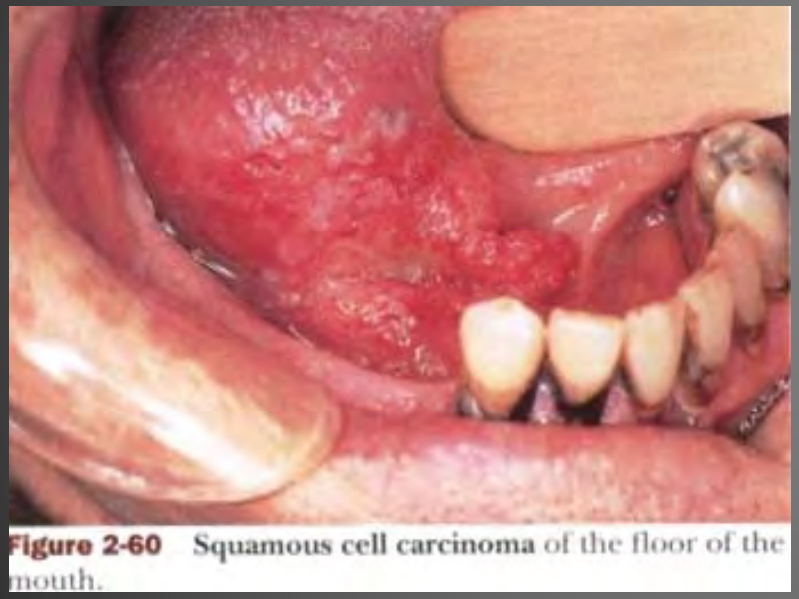
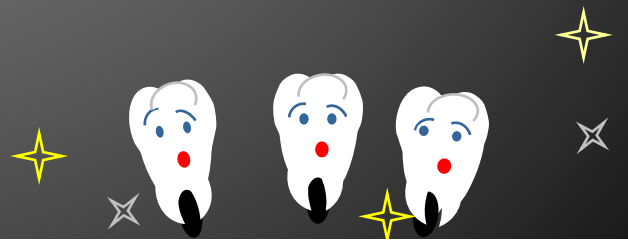
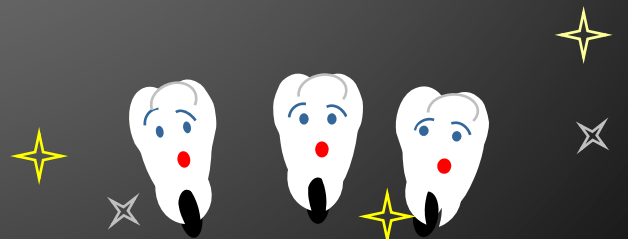


Figure 2-60 **Squamous cell carcinoma** of the floor of the mouth.



SPINDLE CELL CARCINOMA

- Spindle cell carcinoma is a rare variant of SCC.
- Most authorities consider the spindle cells to be simply an anaplastic type of carcinoma cells.
- More than 1/3 of all mucosal cases develop as recurrences after radiotherapy for a more differentiated SCC.



Spindle Cell Carcinoma

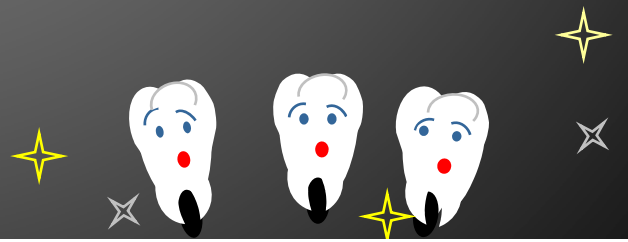
- Lower lip lesions seem to have a special propensity to travel along nerves through the mental foramen and into the mandibular canal.

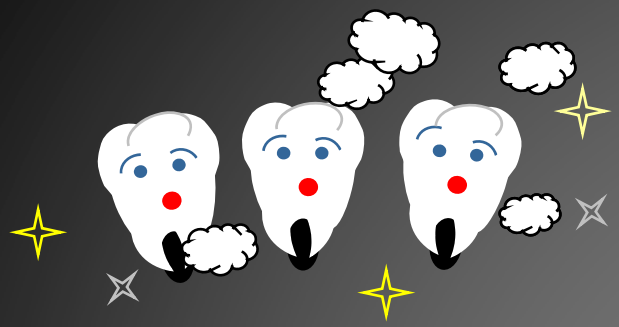
Figure 10-124 • Spindle cell carcinoma. Ulcerated mass of the maxillary alveolar ridge. (Courtesy of Dr. Michael Robinson.)

	Spindle cell carcinoma	Our Case
Age	29~93 (Mean:53)	47
gender	Male = female	male
Site	Intraoral: lower lip, lateral posterior tongue, alveolar ridge, but other site may be involved	Floor of mouth
Shape	Typically pedunculated, polypoid mass. But occasionally sessile, nodular or fungating mass	Dome
Pain	(+)(prominent features)	(-)
Ulceration	(+)	(+)
Growth rate	Rapid	Moderately rapid

SPINDLE CELL CARCINOMA V.S OUR CASE

Figure 10-124 • **Spindle cell carcinoma.** Ulcerated mass of the maxillary alveolar ridge. (Courtesy of Dr. Michael Robinson.)





CONNECTIVE TISSUE ORIGIN

HIV-Associated Kaposi's Sarcoma

- A multifocal neoplasm of vascular endothelial cell origin
- Begin with multiple lesions of the skin or oral mucosa more frequently

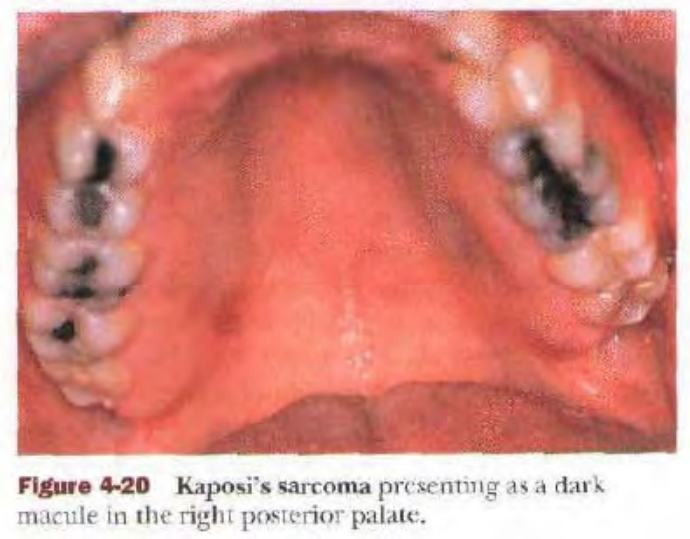


Figure 4-20 **Kaposi's sarcoma** presenting as a dark macule in the right posterior palate.

http://womenchildrenhiv.org/wchiv?page=im-1-04&post=1&slide=179

HIV-ASSOCIATED KAPOSI'S SARCOMA

- The lesion later become nodular and reach large size with surface bleeding, ulceration & necrosis

Figure 7-49 • **HIV-associated Kaposi's sarcoma (KS).** Raised, dark-red enlargement of the mandibular anterior facial gingiva on the left side.

Figure 7-50 • **HIV-associated Kaposi's sarcoma (KS).** Diffuse, reddish-blue nodular enlargement of the left hard palate.

HIV-ASSOCIATED KAPOSI'S SARCOMA

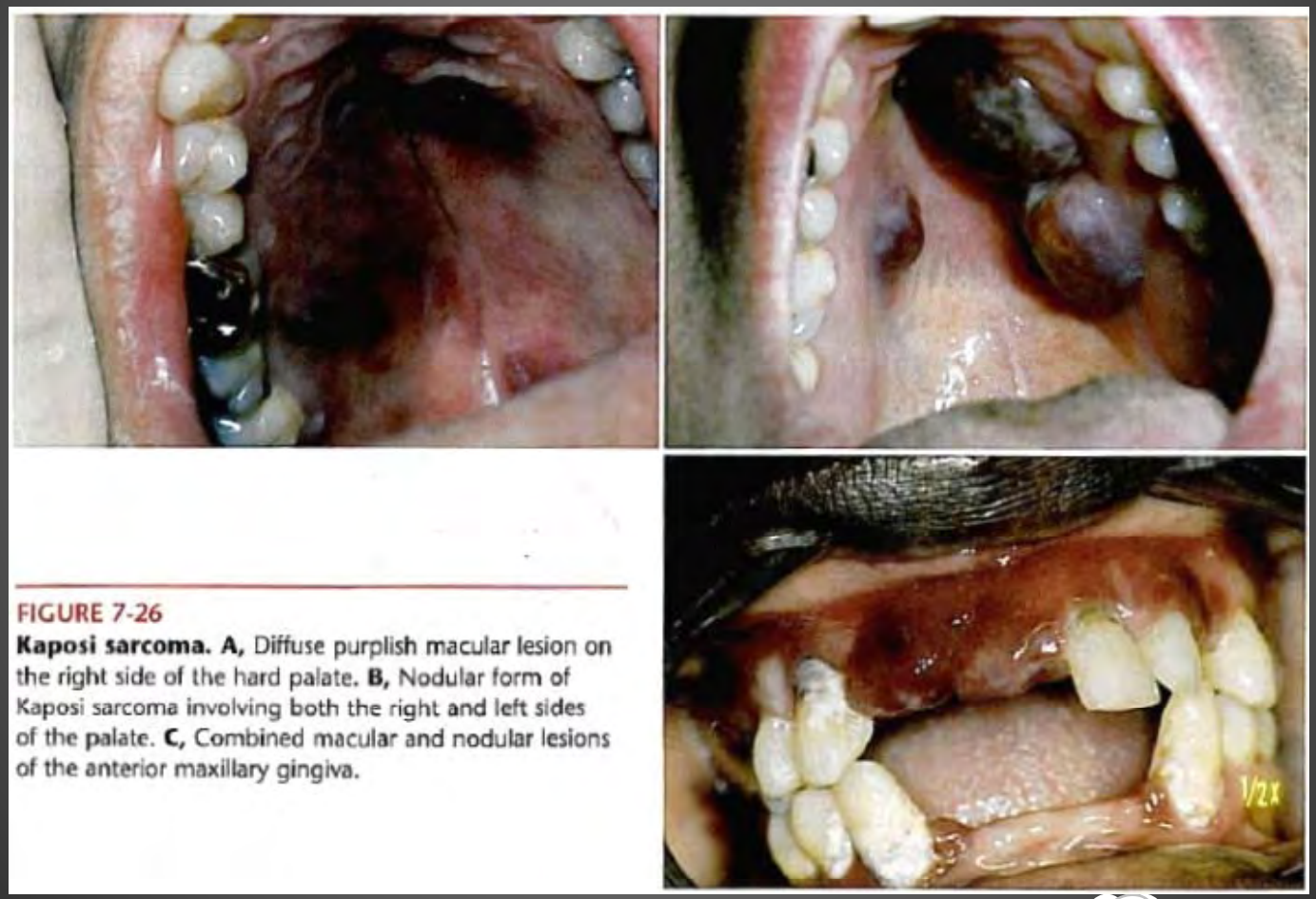
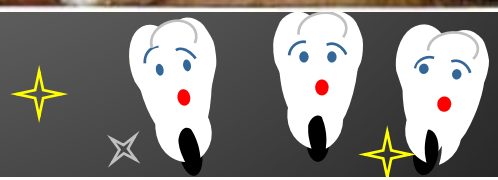
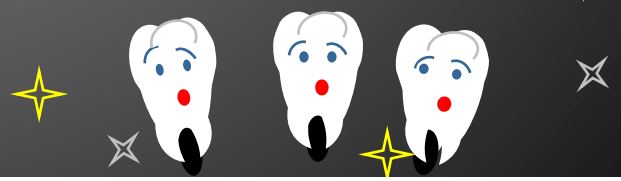


FIGURE 7-26
Kaposi sarcoma. A, Diffuse purplish macular lesion on the right side of the hard palate. **B,** Nodular form of Kaposi sarcoma involving both the right and left sides of the palate. **C,** Combined macular and nodular lesions of the anterior maxillary gingiva.

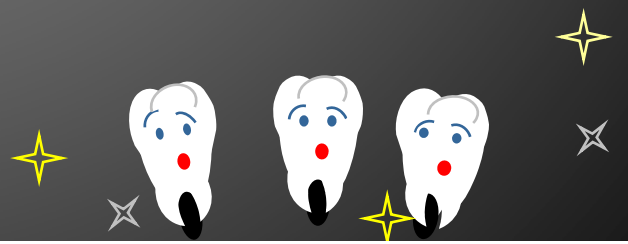


HIV-ASSOCIATED KAPOSI'S SARCOMA

- Thought to have relationship with Human herpesvirus type 8(HHV-8)
- HIV-associated may have other problem such as
  - Hairy tongue
  - Candidiasis infection
  - Necrotizing ulcerative gingivitis(NUG)
  - Necrotizing ulcerative periodontis(NUP)…etc



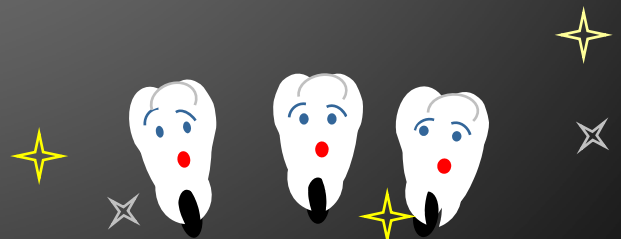
	HIV-associated Kaposi's sarcoma	Our Case
Age	Young adult	47
Site	Hard palate, gingiva, tongue	Floor of mouth (male)
Size	Multiple nodule	2.0cm × 2.0cm
Color	Brown or reddish purple macular lesions	Red



	HIV-associated Kaposi's sarcoma	Our case
Pain	(+)	(-)
Risk factors	Homosexual & bisexual Drug-induced immunosuppresion	Alcohol(+) Betel quid(+) Smoking(+)
Ulceration	(+)	(+)
Lymphadenopathy	(+)	(-)
Bleeding & necrosis	(+)	(-)

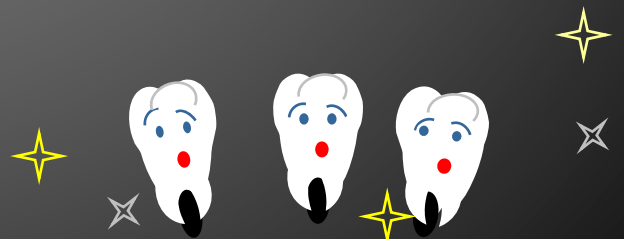
HIV-ASSOCIATED KAPOSI'S SARCOMA V.S OUR CASE

http://womenchildrenhiv.org/wchiv?page=im-1-04&post=1&slide=179



FIBROSARCOMA

- The fibrosarcoma is a malignant tumor of fibroblast.
- Fibrosarcomas most often present as slow-growing masses that may reach considerable size before they produce pain.



FIBROSARCOMA

- Occur at any age but are most common in young adults and children.

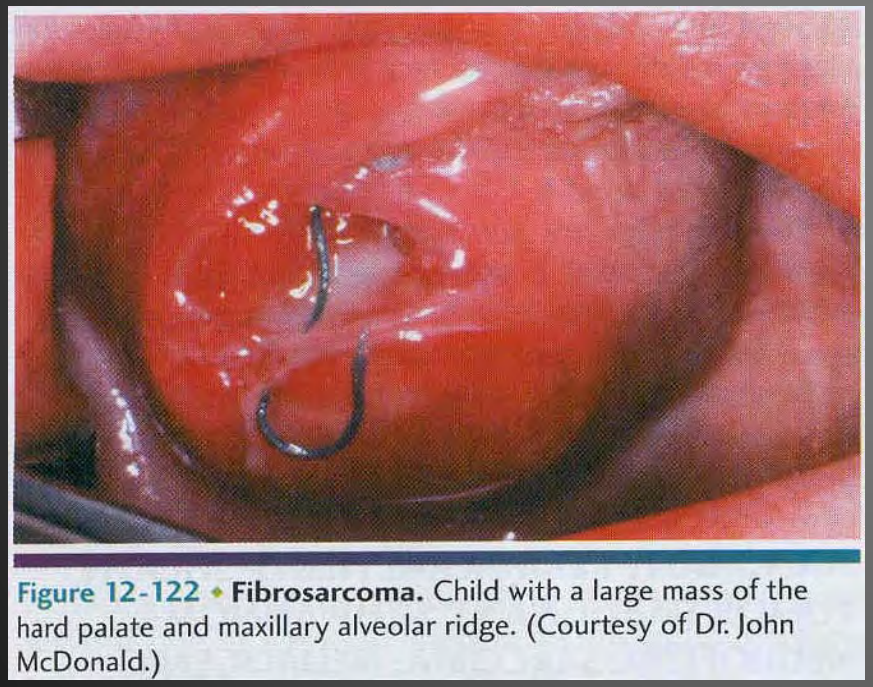


Figure 12-122 • **Fibrosarcoma.** Child with a large mass of the hard palate and maxillary alveolar ridge. (Courtesy of Dr. John McDonald.)

British Journal of Oral Surgery (rg75), 13, 78-81
FIBROSARCOMA IN THE MANDIBLE-A CASE REPORT
Z. HAIDARD, .D.S.(U. Dasmascus)***Maxilla-Facial and Plastic Surgery Unit, Bangour General Hospital,West Lothian***

FIBROSARCOMA

- Most common in the extremities , only 10% occur in the head and neck region.

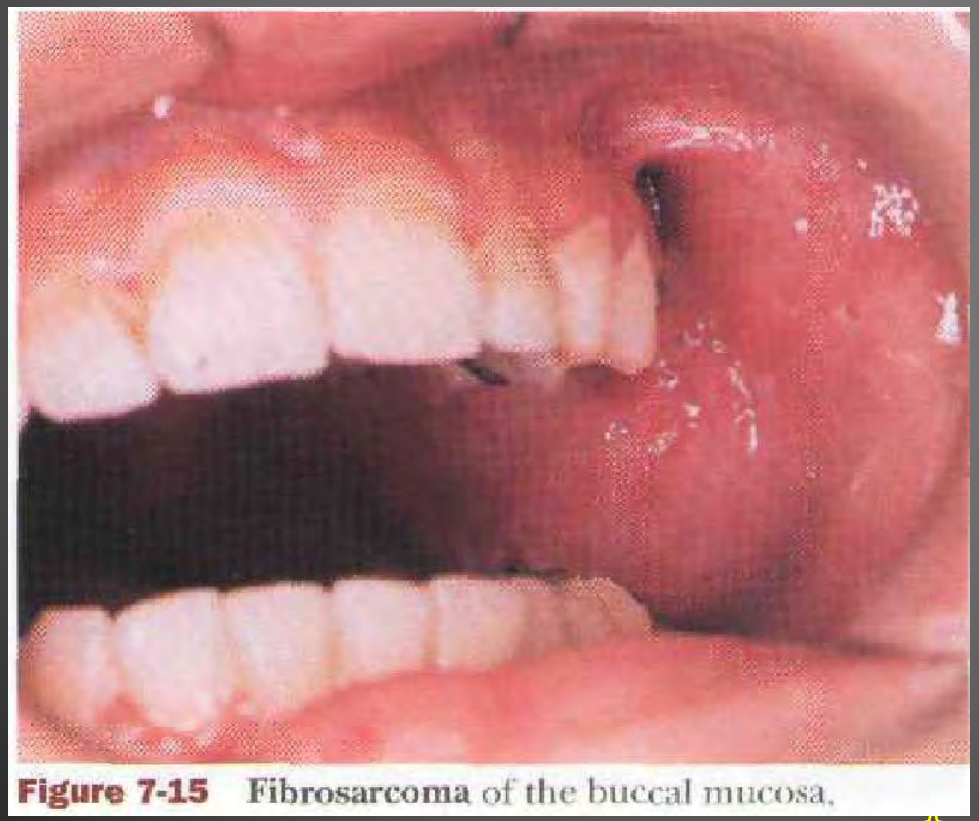


Figure 7-15 Fibrosarcoma of the buccal mucosa.

FIBROSARCOMA

	Fibrosarcoma	Our Case
Age	any age (most common in youth)	47 y/o
Site	10% in the head and neck, rare in oral lesions	Floor of mouth
Fluctuation	(-)	(-)
Pain	(+)	(-)
Ulceration	(+)	(+)
Lymphadenopathy	(+)	(-)

FIBROSARCOMA V.S OUR CASE

British Journal of Oral Surgery (rg75), 13, 78-81
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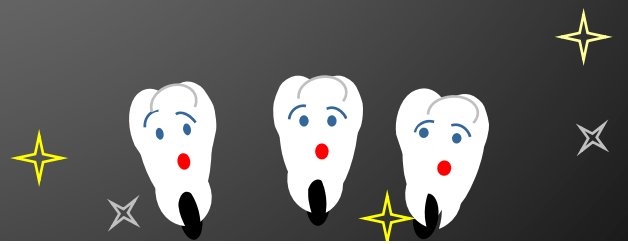
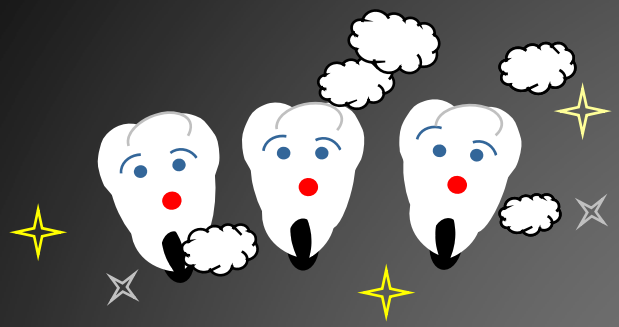
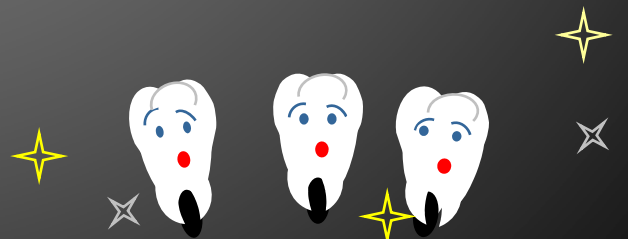




SALIVARY GLAND ORIGIN

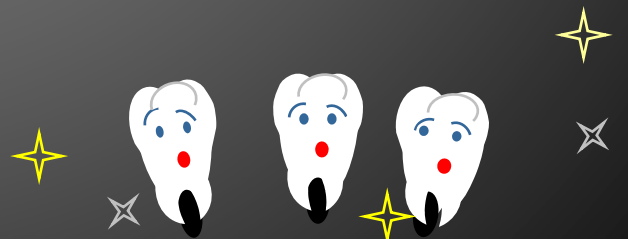
MUCOEPIDERMOID CARCINOMA

- It is one of the most common salivary gland malignancies.
- Composed of mixture of mucus-producing cell and squamous(epidermoid) cell



MUCOEPIDERMOID CARCINOMA

- Most patient are aware of the lesion for one year or less, usually appears as a asymptomatic swelling.
- Some were associated with previous radiation therapy to head and neck region.
- May be mistaken clinically for a mucocele.



MUCOEPIDERMOID CARCINOMA

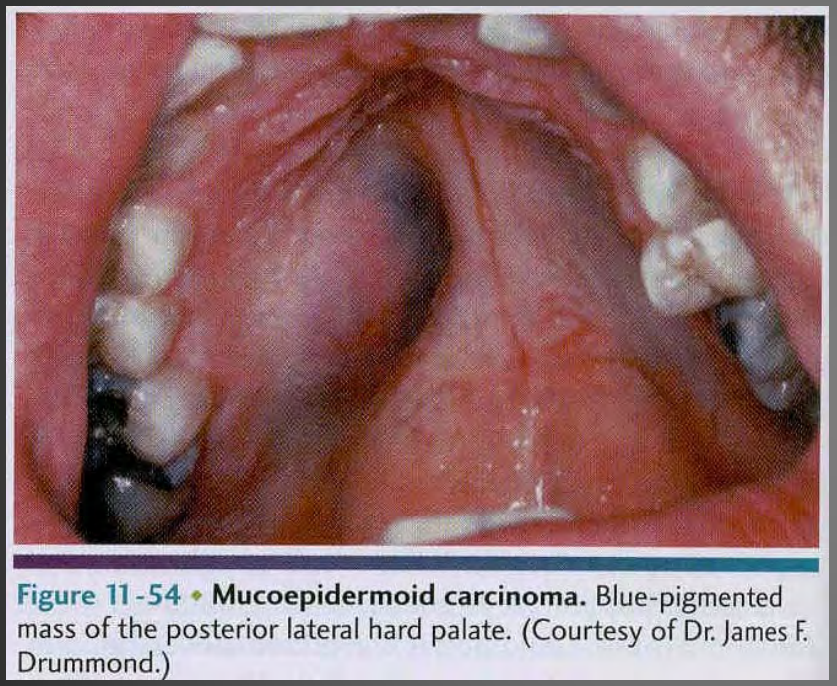
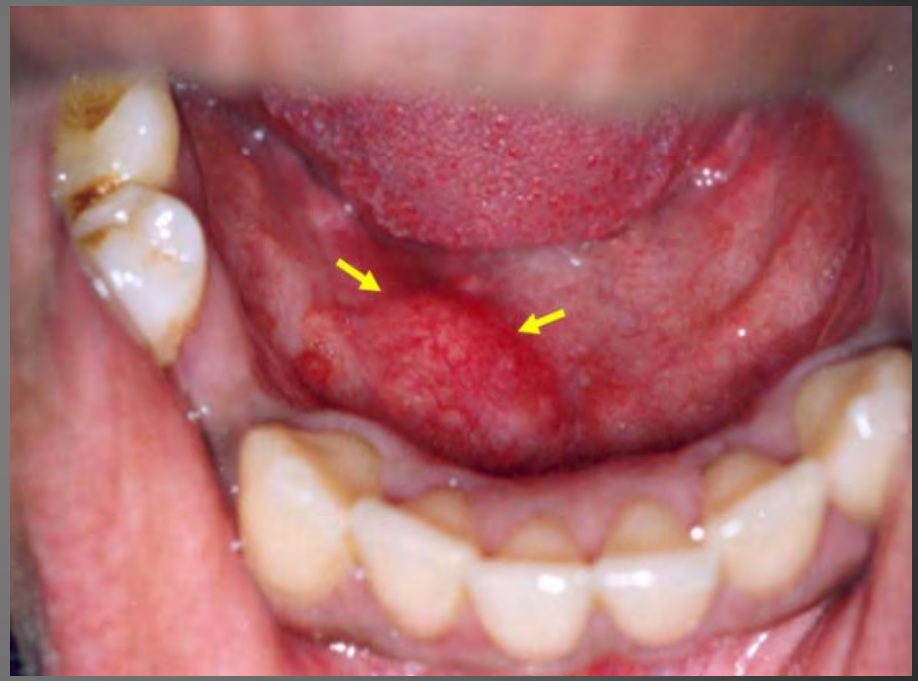
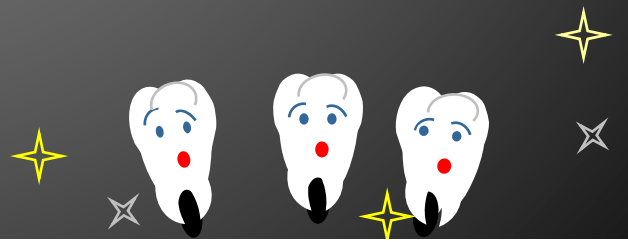


Figure 11-54 • Mucoepidermoid carcinoma. Blue-pigmented mass of the posterior lateral hard palate. (Courtesy of Dr. James F. Drummond.)

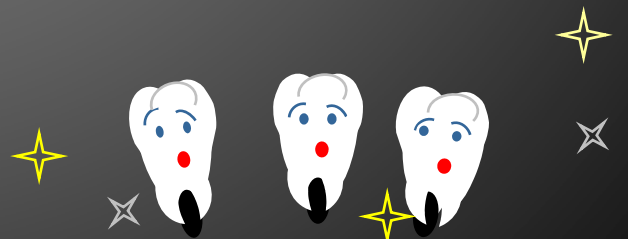


http://screening.iarc.fr/atlasoral_detail.php?flag=0&lang=1&Id=B8000001&cat=B8



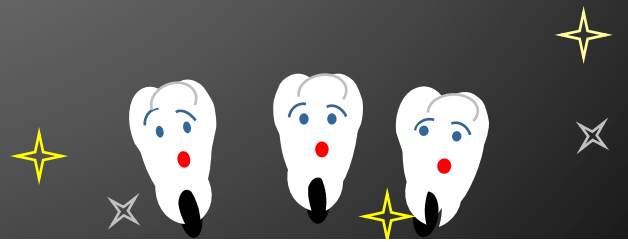
MUCOEPIDERMOID CARCINOMA

	Mucoepidermoid Carcinoma	Our Case
Gender	Slightly female predilection	♀
Age	10~70 y/o	47
Site	Most common site is **parotid gland**, then minor salivary gland(especially the palate)	Floor of mouth
Size	Variable	2.0cm × 2.0cm

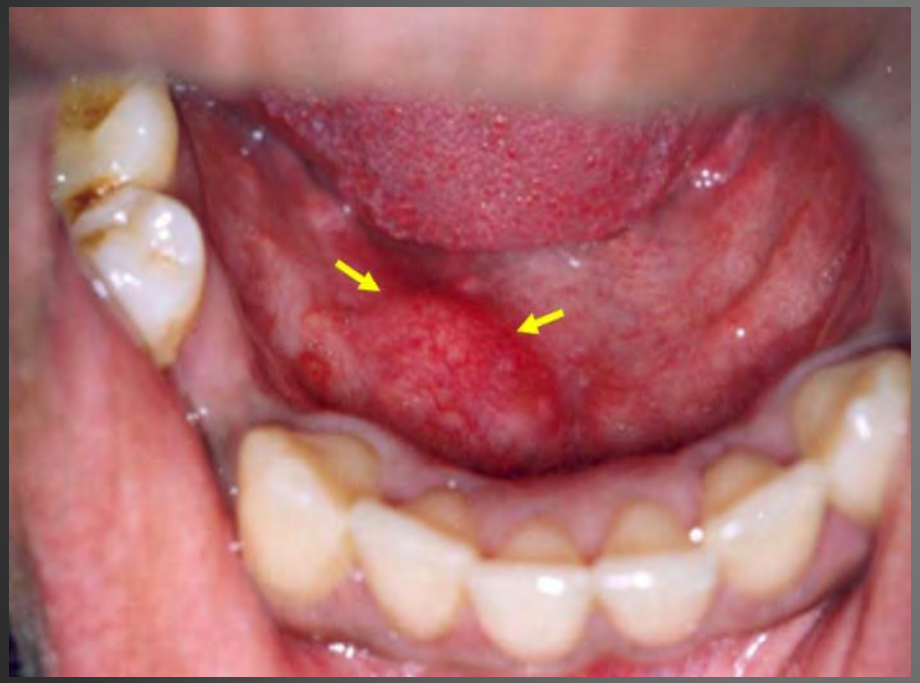


MUCOEPIDERMOID CARCINOMA

	Mucoepidermoid Carcinoma	Our Case
Color	Blue or red	Red
Shape	Variable	Dome
Fluctuation	(+)	(-)
Pain	(+) , facial nerve palsy	(-)



Mucoepidermoid carcinoma v.s our case



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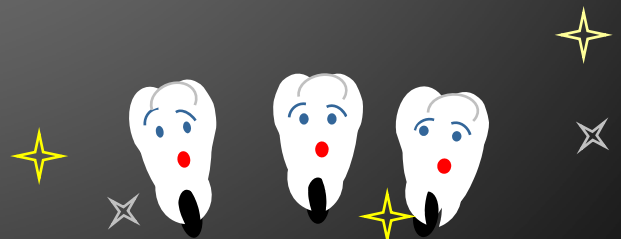
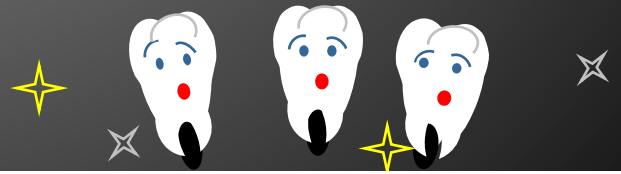


Adenoid Cystic Carcinoma

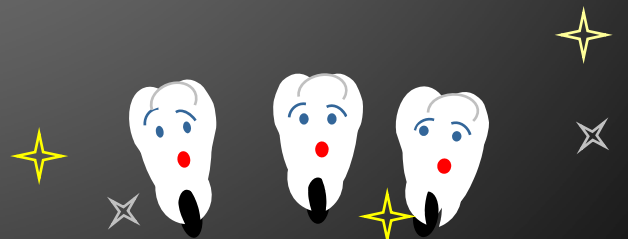
- The adenoid cystic carcinoma is one of the more common and best-recognized salivary maliganancies.

Figure 11-68 • **Adenoid cystic carcinoma.** Painful mass of the hard palate and maxillary alveolar ridge. (Courtesy of Dr. George Blozis.)

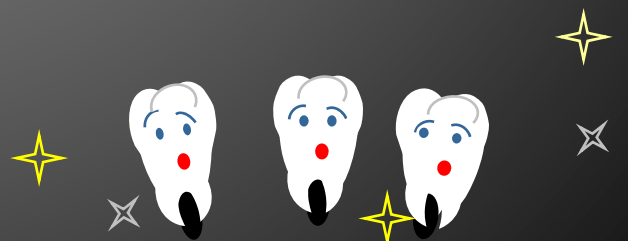
http://www.annals.edu.sg/pdf200409/V33N4p72S.pdf



	Adenoid cystic carcinoma	Our Case
Gender	Equal	Male
Age	Middle age (rare below 20)	47
Site	Minor salivary gland(50% in palate) > Parotid gland = Submandibular gland	Floor of mouth (male)
Size	Variable	2.0cm × 2.0cm
Surface	Smooth or ulcerated	Rough



	Adenoid cystic carcinoma	Our case
Pain	(+)	(-)
Induration	(-)	(+)
Risk factors	none	Alcohol(+) Betel quid(+) Smoking(+)
Ulceration	(+) / (-)	(+)
Lymphadenopathy	Uncommon	(-)



Adenoid cystic carcinoma v.s our case

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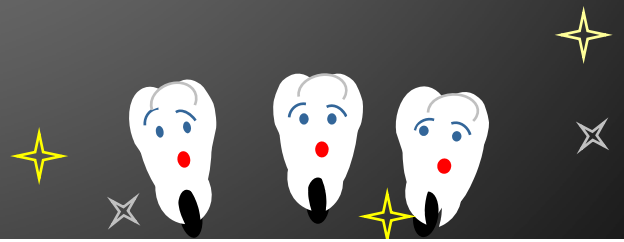
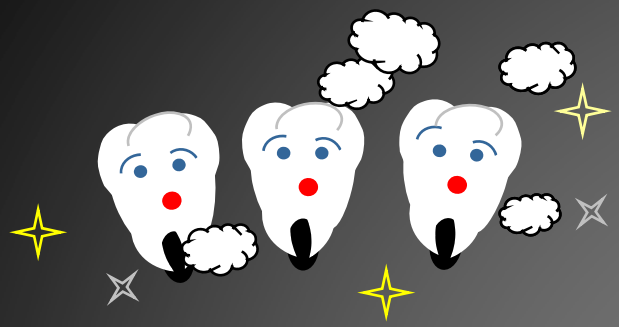
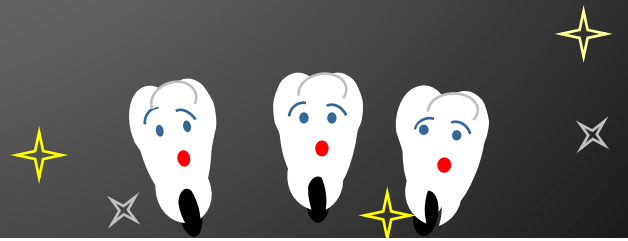




METASTATIC ORIGIN

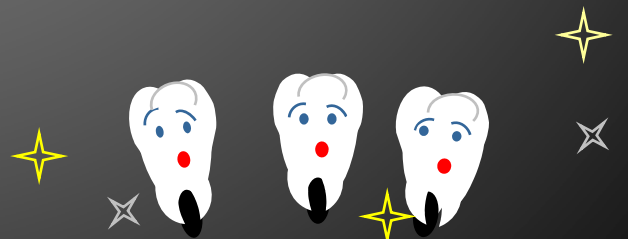
METASTASES TO THE ORAL SOFT TISSUE

- Metastatic tumors to the oral cavity are uncommon and represent approximately 1% of all oral malignancies.
- For men, lung cancer is responsible for more than one third of all oral soft tissue metastases.
- For women, breast cancer accounts for 25% of all cases.



METASTASES TO THE ORAL SOFT TISSUE

Figure 12-141 • **Metastatic renal carcinoma.** Nodular mass of the left lateral border of the tongue. (Courtesy of Dr. Mark Bowden.)

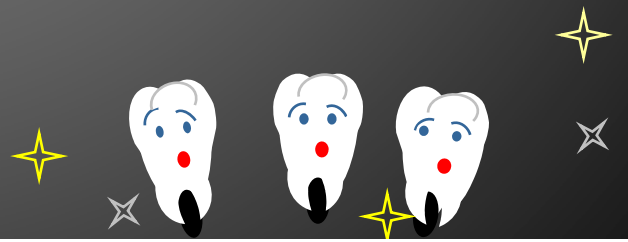


METASTASES TO THE ORAL SOFT TISSUE

	Metastases to the oral soft tissue	**Our Case**
gender	male	male ✡
age	Middle-aged and older adults	47 ✡
Site	Gingiva	Floor of mouth
Surface	Smooth	Rough
Ulceration	(+)(larger tumors)	(+) ✡
shape	Nodular	Dome
color	Light pink to normal mucosa pink and red	Red ✡

METASTASES TO THE ORAL SOFT TISSUE V.S OUR CASE

Figure 12-141 • **Metastatic renal carcinoma.** Nodular mass of the left lateral border of the tongue. (Courtesy of Dr. Mark Bowden.)

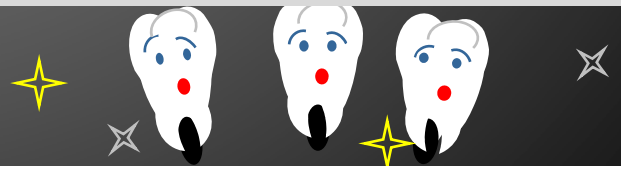


Working diagnosis

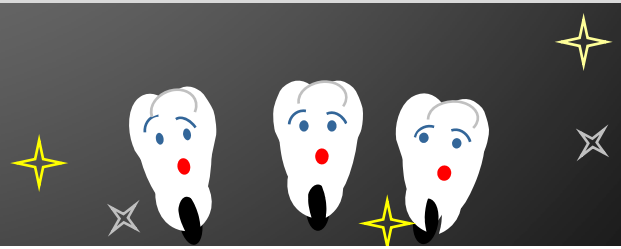
- Epithelial origin
  - →**Squamous cell carcinoma**
  - →**Spindle cell carcinoma**
- Connective tissue origin
  - →**Kaposi's sarcoma(HIV-associated)**
  - →**Fibrosarcoma**
- Salivary gland origin
  - →**Mucoepidermoid carcinoma**
  - →**Adenoid cystic carcinoma**
- Metastatic origin
  - →**Metastases to the oral soft tissue**

SQUAMOUS CELL CARCINOMA

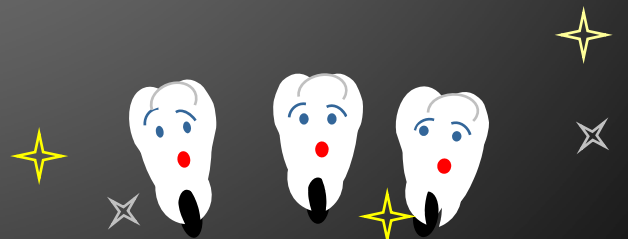
	Squamous Cell Carcinoma	Our Case
Gender	Male>Female	♂
Age	Accidence increased with age	47
Site	lip，buccal mucosa，floor or roof of the mouth，tongue，soft and hard palate，gum Tongue----most common site **Oral floor----35% intraoral CA , involved much less commonly in female**	Floor of mouth (male)



	Squamous Cell Carcinoma	Our Case
Size	Random	2.0cm × 2.0cm
Surface	Variable	Rough
Base	Broad base	Sessile
Shape	Irregular	Dome
Color	Pink , white, red, white & red	Red
Consistency	Firm	Soft
Fluctuation	(-)	(-)
Pain	Minimal pain during early growing phase	(-)



	Squamous Cell Carcinoma	Our Case
Mobility	Fixed	Fixed
Induration	(+)	(+)
Risk factor	Alcohol(+) Betel quid(+) Smoking(+)	Alcohol(+) Betel quid(+) Smoking(+)
Duration	Often 4~8 month before seeking professional help	2 Month
Ulceration	(+)	(+)



SQUAMOUS CELL CARCINOMA V.S OUR CASE

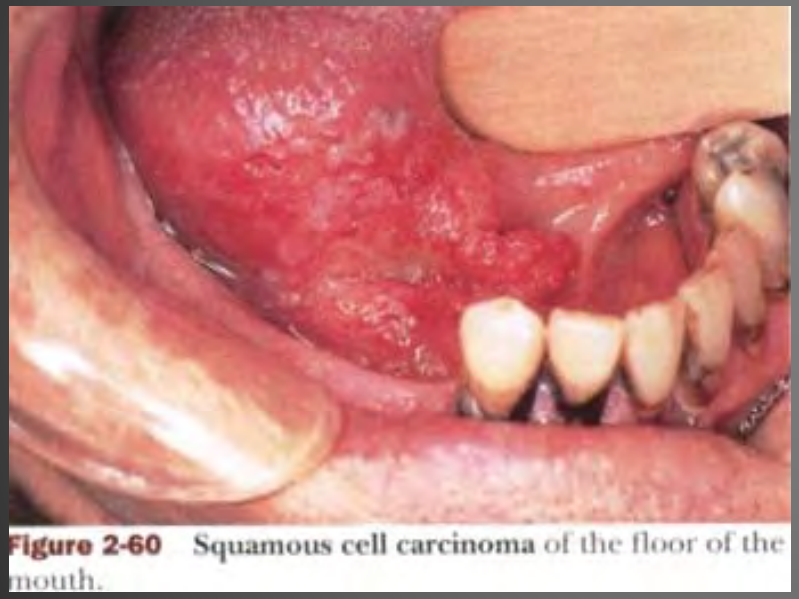
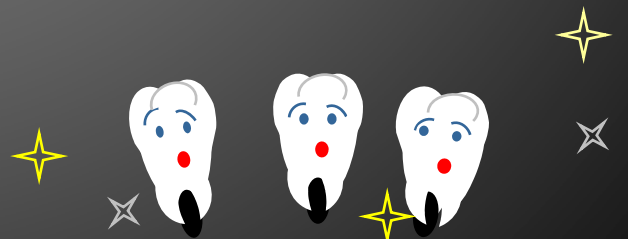
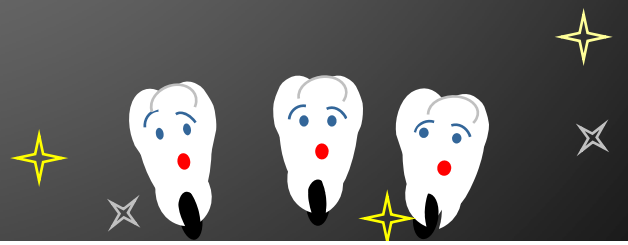


Figure 2-60 **Squamous cell carcinoma** of the floor of the mouth.

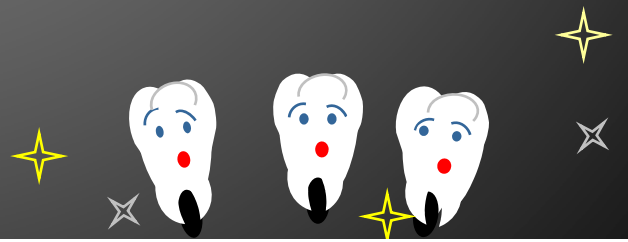


OUR CASE



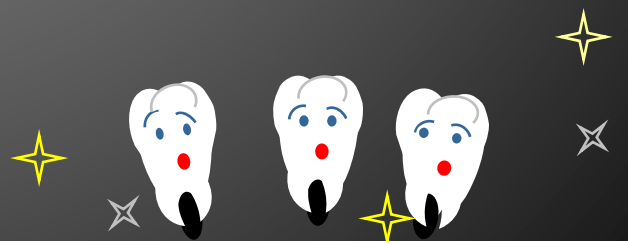
FINAL IMPRESSION

- Exophytic squamous cell carcinoma, at right mouth floor
- Leukoplakia, at buccal gingiva of tooth 44 45 46
- Leukoplakia, at right lateral border of tongue



REFERENCE

- Oral & maxillofacial pathology, 2nd & 3rd edition
- Oral Pathology Clinical Pathologic Correlations ,4th edition
- Contemporary Oral and Maxillofacial Pathology, 2nd edition
- Differential Diagnosis of Oral and Maxillofacial Lesions, 5th edition



Thanks for Your Attention!