



GROUP & INDIVIDUAL LEARNING

ORAL PATHOLOGY



audss
ROYAL COLLEGE OF DENTISTS STUDENTS' SOCIETY



BOQ
SPECIALIST

Outline

- White lesions
- Red lesions
- Ulcerative lesions
- Pigmented lesions

Categories

- Developmental
- Hyperplastic
- Inflammatory
- Idiopathic
- Infective

Descriptions

- Site
- Colour
- Size
- Margins
- Consistency
- Contour
- Shape

White Lesions

Developmental



White Lesions

Infective



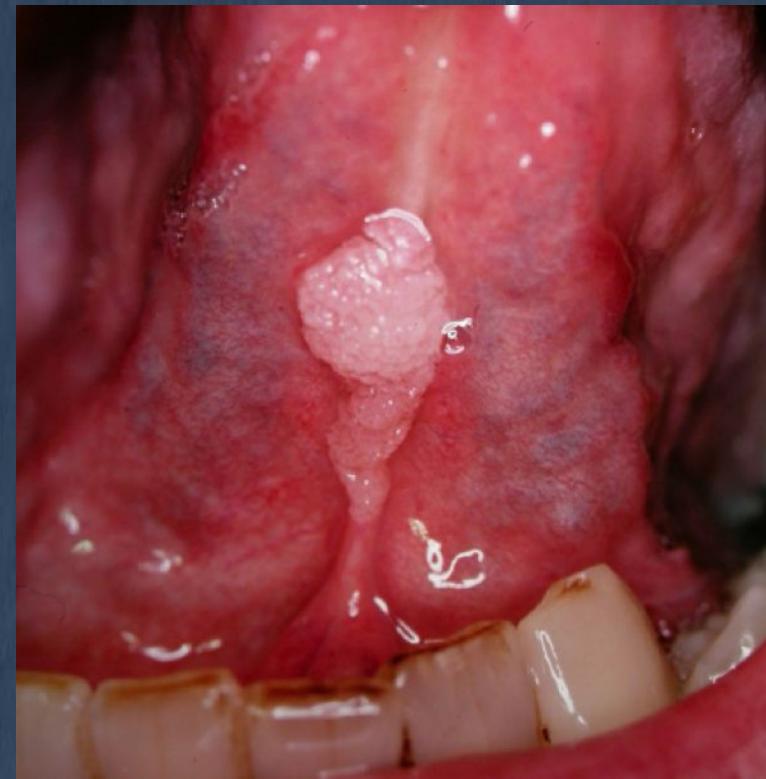
White Lesions

Hyperplastic



White Lesions

Hyperplastic



White Lesions

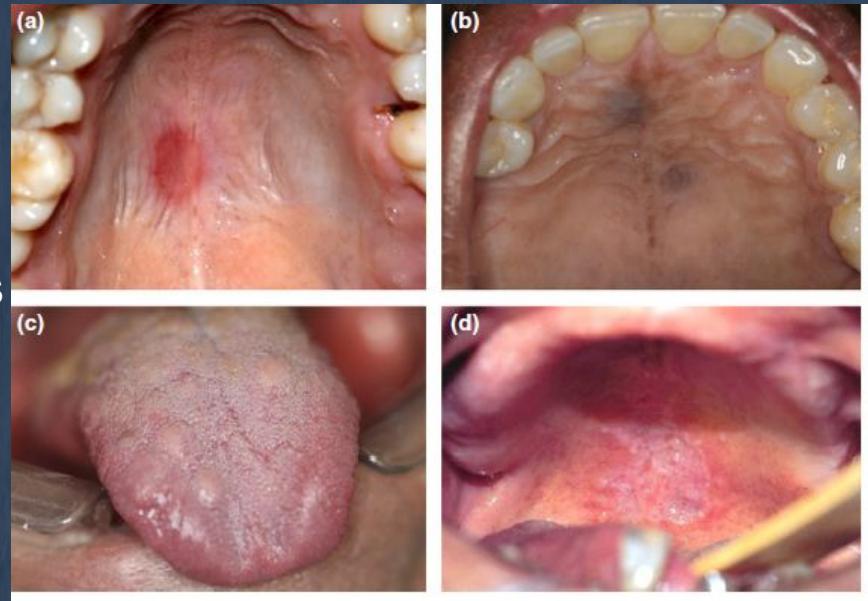
Idiopathic



Red Lesions: Infective (bacterial)

Leprosy

- Don't need to know much
- Red macules, purple papules
- Nodules and ulceration
- Keep in mind for differential diagnosis



Red lesions: Infective (fungal)

Candida

Hypertrophic/hyperplastic

- White patch
- If can remove= acute
- If can't remove= chronic

Atrophic

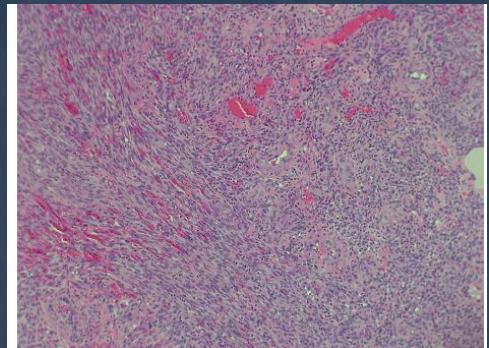
- Red patch (generally denture related)
- Acute= symptomatic (burning pain), sudden onset
- Chronic= generally asymptomatic, been there a while
- Two can interchange



Red Lesions: Infective (viral)

Kaposi's Sarcoma

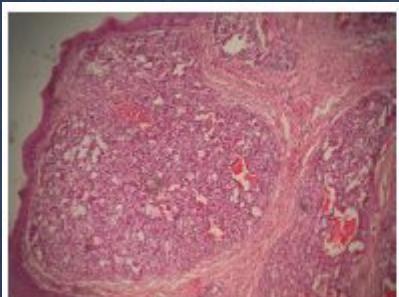
- Herpes Virus 8
- Most frequent on palate
- Vascular: purplish area or nodule
- Easily bleeds



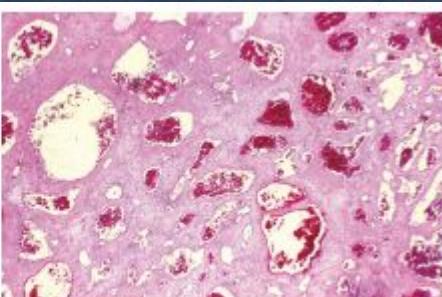
Red Lesions: Developmental??

Haemangioma

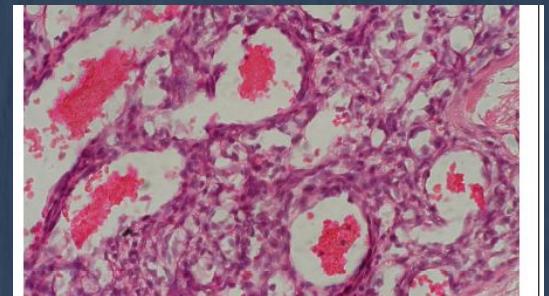
- Not a true red patch
- Localised proliferation of endothelial cells
- Can press blood out → goes white
- Capillary or cavernous, clinical behaviour the same



Capillary haemangioma



Cavernous haemangioma



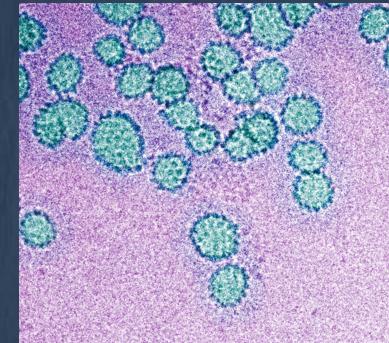
Red Lesions: hyperplastic?

- Pretty much don't exist
- Remember red lesions are thinning of tissue
- However, can get ulcerated surface on hyperplastic tissue

SCC- Neoplastic

Aetiology

- Tobacco use
- Betel nut chewing
- Alcohol
- HPV infection (16 and 18)



SCC

Clinical Appearance

- Variable
 - red/white speckled patches
 - Raised (HPV)
 - Non-healing ulcers
- Sites
 - Lower lip (exposure to sunlight)
 - Tongue (lateral borders especially)
 - Buccal mucosa
 - Floor of mouth
 - Soft palate
 - Alveolar ridge

SCC

Histology

- Epithelial Dysplasia
 - Atypical changes to epithelium
- Malignant epithelial cells break through basement membrane

Dysplasia

** Know your definitions **

Definition

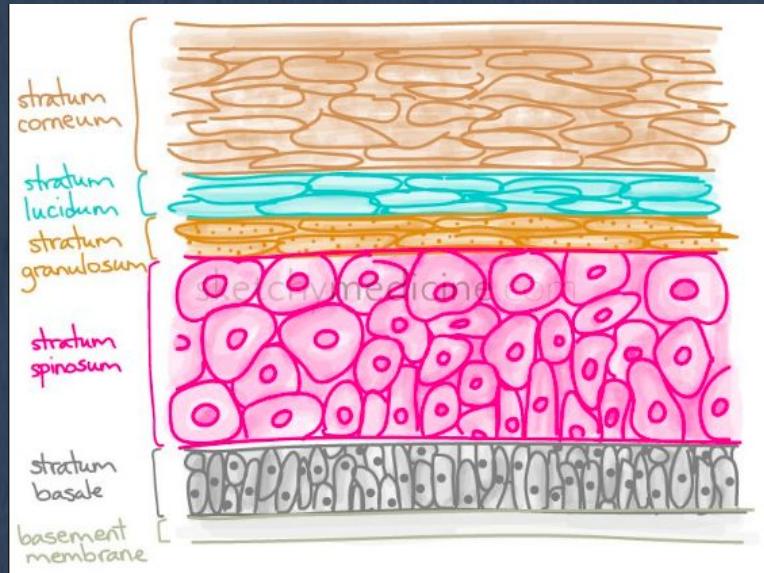
- A collection of atypia involving epithelium

Cellular

- Nuclear and cellular **pleomorphism**
- **Hyperchromasia**

Architectural

- Drop-shaped rete pegs
- Irregular epithelial stratification
- **Dyskeratosis**
- **Suprabasal Mitoses** (will see increased number of mitotic figures above basal layer)
- Loss of polarity of basal cells



Dysplasia grading

Mild Dysplasia

- Basal 1/3rd of epithelium
- Slight nuclear pleomorphism
- Normal maturation and stratification in upper layers

Moderate Dysplasia

- Basal 2/3rds of epithelium
- Evident nuclear pleomorphism
- Suprabasal mitoses (but no abnormality)
- Normal cell maturation and stratification

Severe Dysplasia

- More than 2/3rds of epithelium
- Loss of maturation and normal stratification
- Abnormal suprabasal mitoses

Tumour Grading

Carcinoma In Situ **exam**

- Pre-invasive SCC
- Has not broken through basement membrane yet
- Significantly better prognosis as it has not invaded CT

Grade 1

- Well differentiated
- More “normal” thus less dangerous

Grade 2

- Moderately differentiated

Grade 3

- Poorly differentiated

Grade 4

- Anaplastic (complete lack of differentiation)

TNM Staging

- Size, nodal involvement and metastasis

Survival rates

- Stage 1 or 2: >50% 5 year survival rate (>90% for lip)
- Stage 3: 15-20%
- Stage 4: <5%

Pathologist's report (exam question)

Question: The lesion is SCC. What histological features does the pathologist need to describe for the surgeon that may give an indication of the lesion's clinical behaviour and assist in clinical management? (10 mins)

Translation: What histological features would affect the prognosis and management of the lesion; ie. focus more on the malignancy

1. Has it broken through the basement membrane
 - o Determines how much the surgeon needs to cut
2. Pattern of invasion
 - o Are the malignant cells cohesive or infiltrative
3. Perivascular, nodal and/or perineural invasion
 - o Determines whether or not lymph nodes or other parts need to be removed
4. Invasion of underlying structures (eg. muscles, submucosa, bone)
5. Positive surgical margin
 - o Did the biopsy have malignant cells at the border?
6. Grade of differentiation
 - o The more poorly differentiated, the more aggressive the cancer