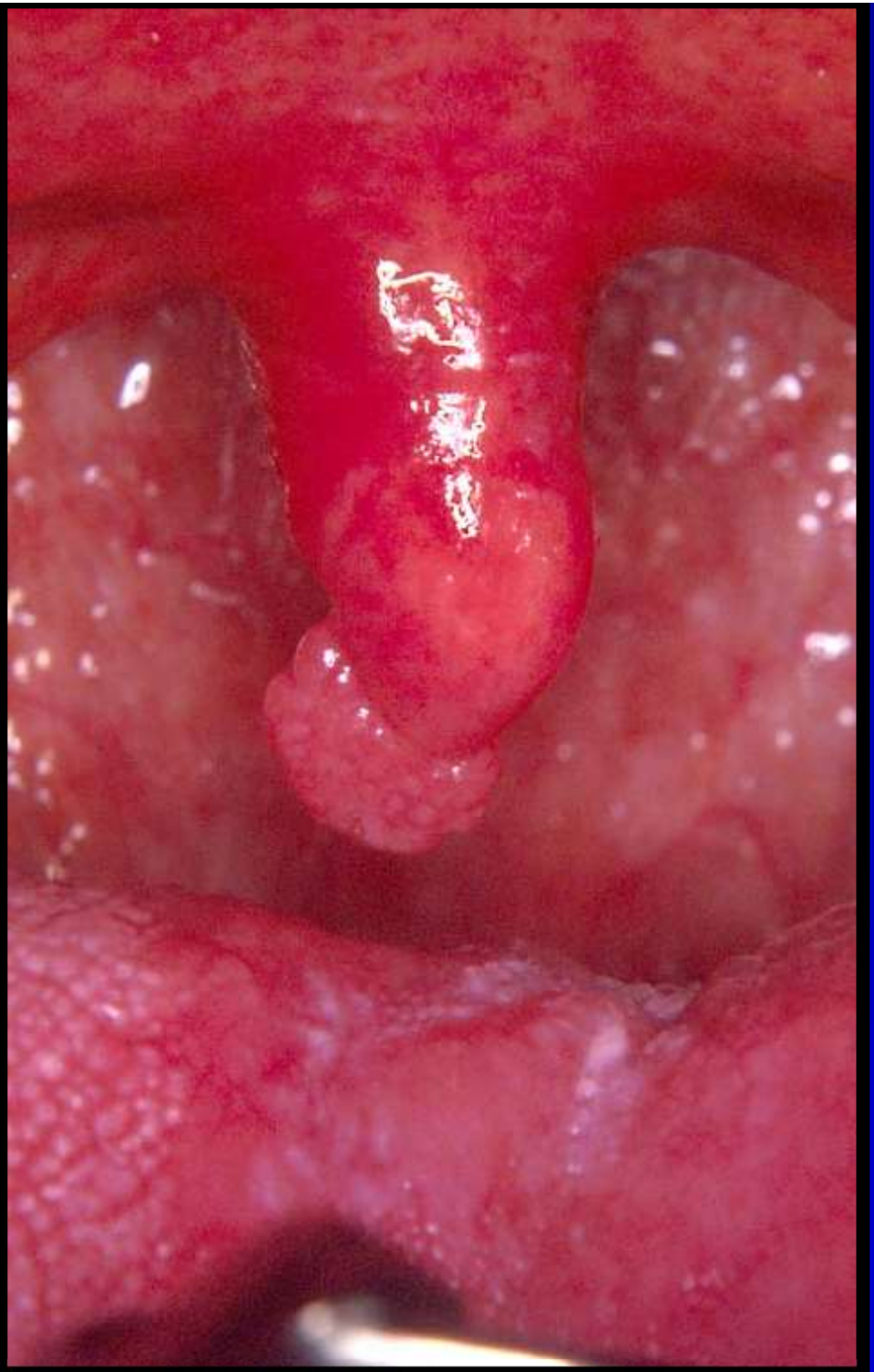


Dr Agnieszka Frydrych

THE UNIVERSITY OF WESTERN AUSTRALIA

Benign epithelial pathosis

Why is this important?

- Common problems
- Important to recognize and manage appropriately

→ **Why?**

Why is this important?

Why is this important?

Leukoedema

- Aetiology and pathogenesis
  - → Generalized mild opacification of oral mucosa
  - →Common

Leukoedema

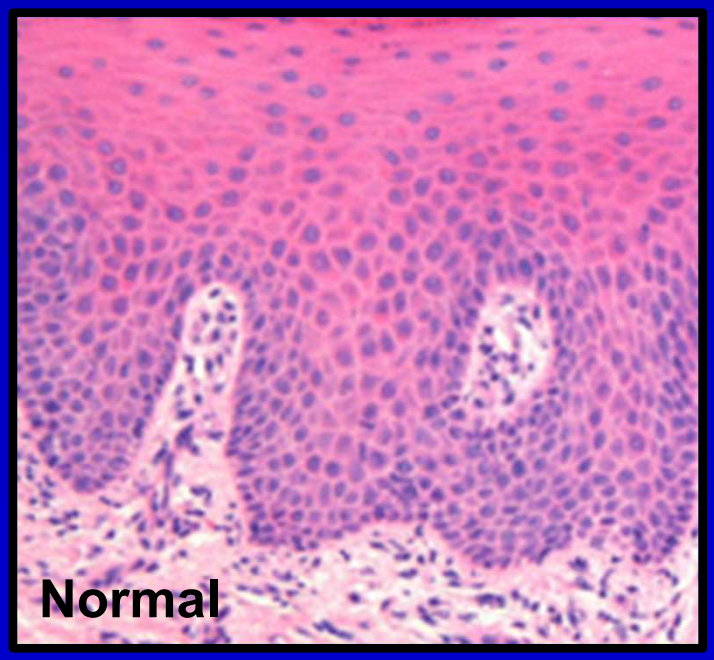
- Clinical features
  - → Incidental finding
  - →Asymptomatic and symmetrically distributed

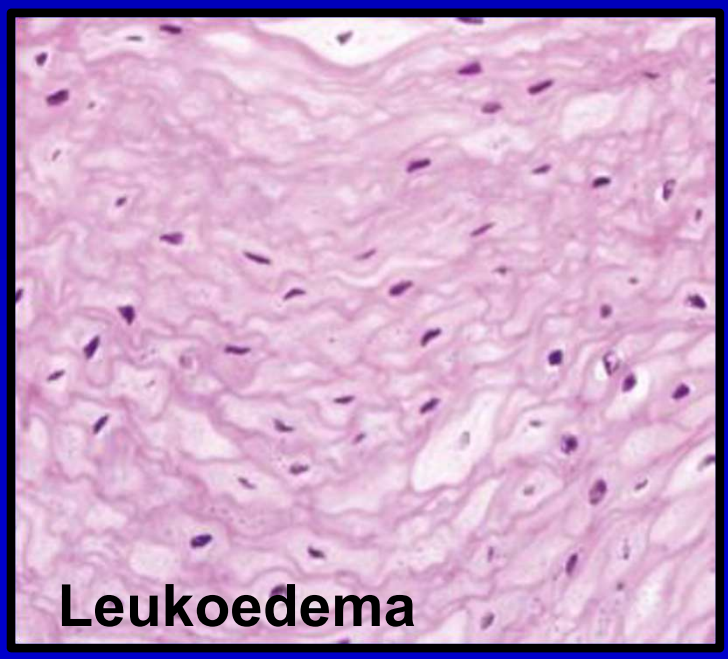
Leukoedema

Photos courtesy of Dr JE Bouquot

Leukoedema

- Histopathology
  - → Epithelium is parakeratotic and acanthotic
  - → Intracellular oedema
  - → Pyknotic nuclei



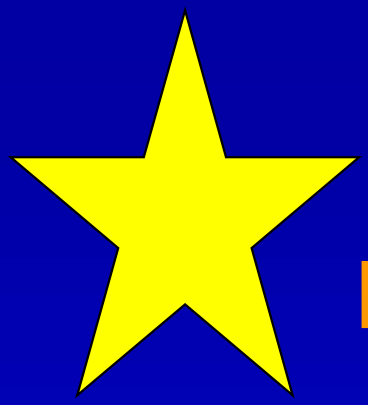


Leukoedema

- Differential diagnosis
  - → White sponge nevus
  - → Frictional keratosis
  - → Oral lichen planus
  - → Other

★ ***Leukoedema disappears on stretching!***

Leukoedema

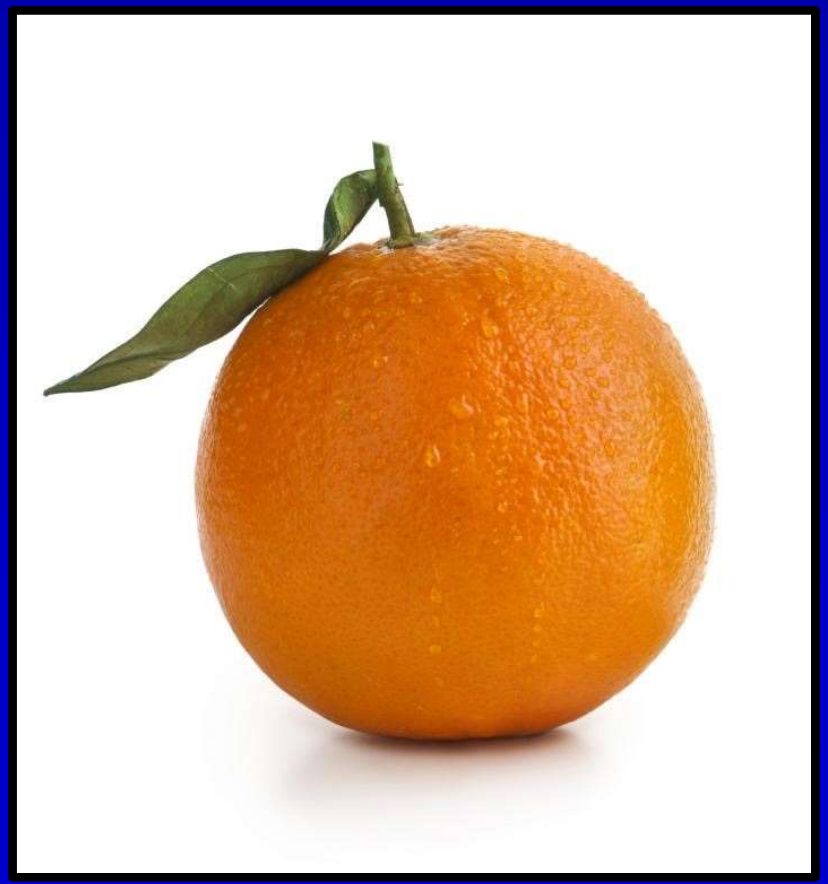


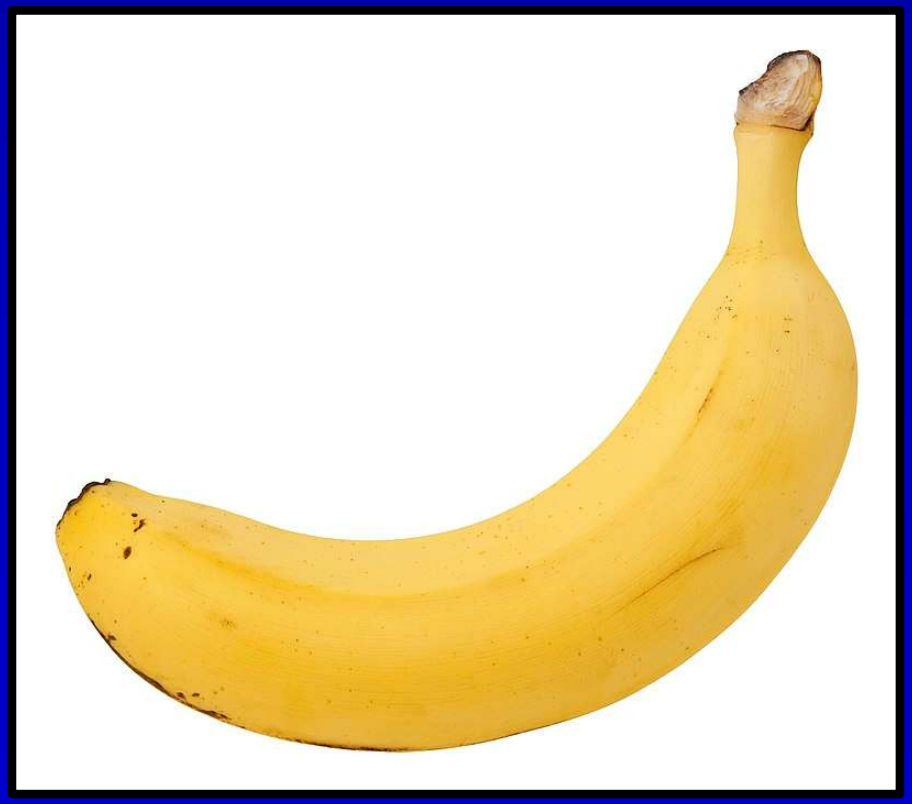
Differential diagnosis

- The process of comparing the patient's status with the known signs, symptoms and other features of the diseases that are possible causes of the patient's condition or lesion

Differential diagnosis

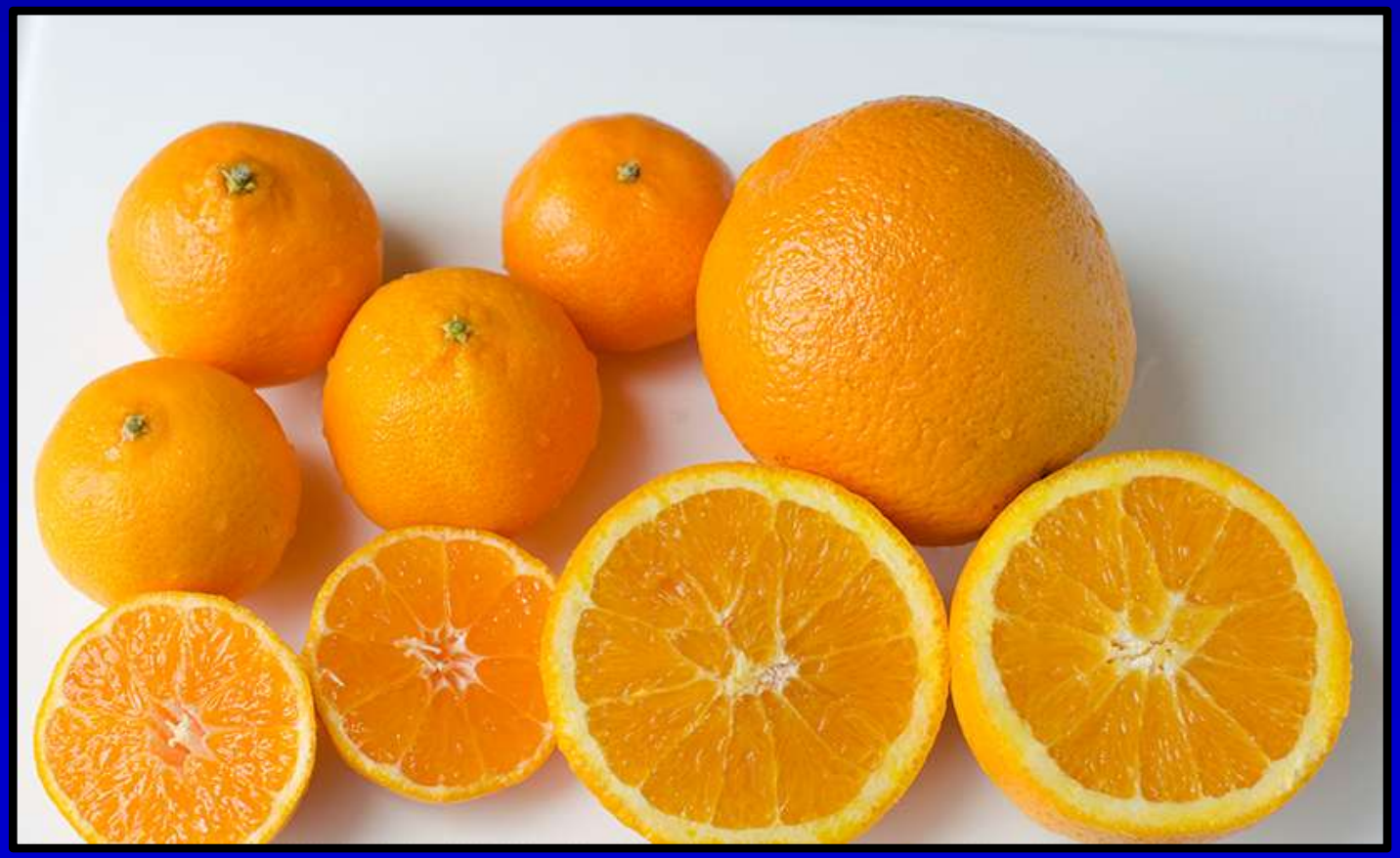
- Differential diagnosis





Differential diagnosis

- Differential diagnosis



Differential diagnosis

- Differential diagnosis

Leukoedema

- Treatment
  - → None required

White sponge nevus

- Aetiology and pathogenesis
  - → Autosomal dominant condition

White sponge nevus

- Clinical features
  - → Appear early in life
  - → White, thickened, spongy lesions
  - → Usually bilateral and symmetric
  - → Asymptomatic

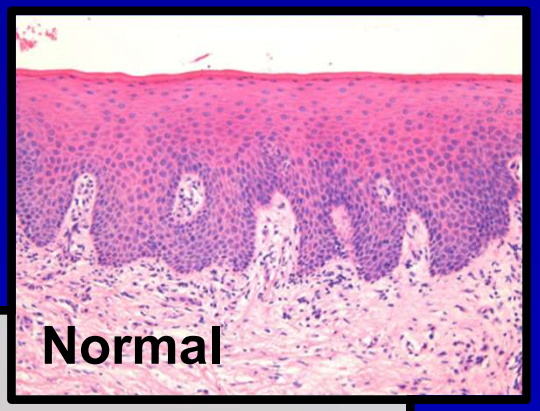
Photos courtesy of Dr JE Bouquot

White sponge nevus

Photos courtesy of Dr JE Bouquot

White sponge nevus

- Histopathology
  - → Thickened epithelium
  - → Spongiosis, acanthosis, parakeratosis
  - → Perinuclear condensation of cytoplasm



White sponge nevus

- Differential diagnosis
  - → Leukoedema
  - → Oral lichen planus
  - → Frictional keratosis
  - → Other

White sponge nevus

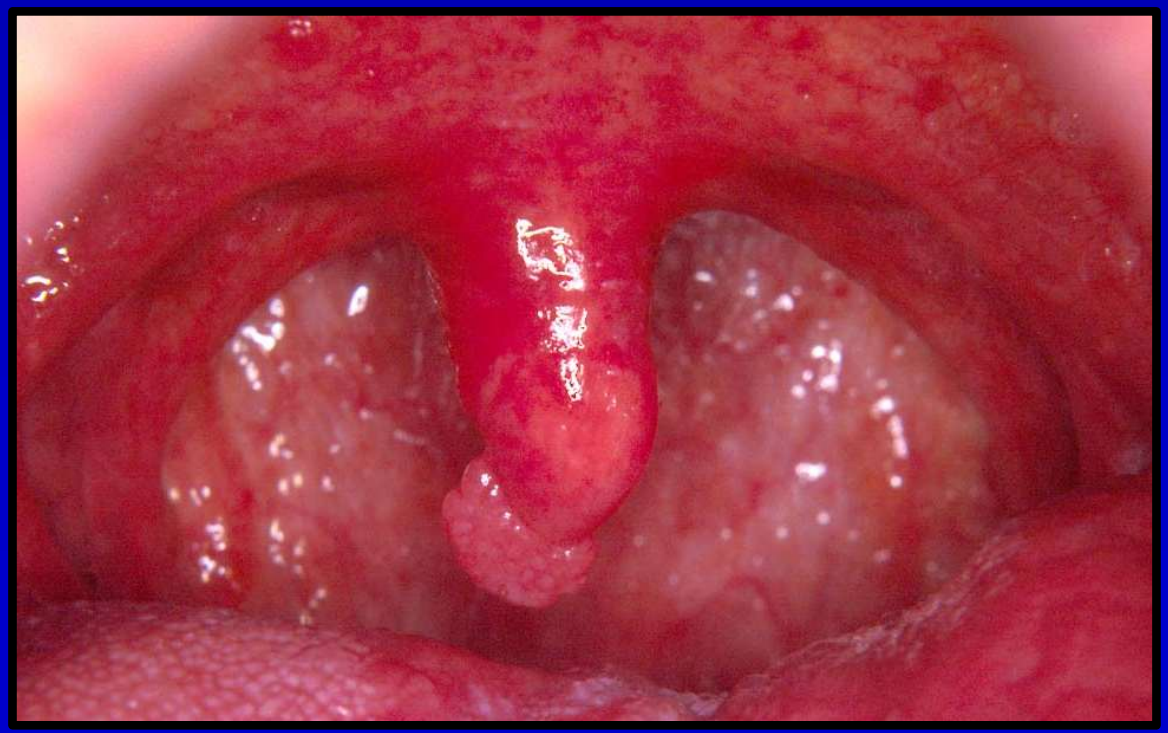
- Treatment
  - → None required

Squamous papilloma

- Aetiology and pathogenesis
  - → Benign lesions caused by the HPV (Types 6 and 11)

Squamous papilloma

- Clinical features
  - → Distinctive exophytic lesions
  - → Cauliflower-like / finger like processes

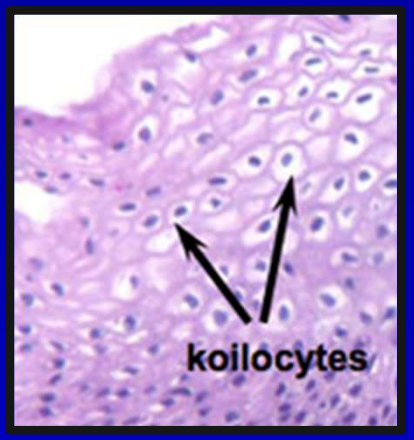


Squamous papilloma

Photos courtesy of Dr JE Bouquot

Squamous papilloma

- Histopathology
  - → Stratified squamous epithelium supported by vascular connective tissue core
  - → Koilocytes may be seen



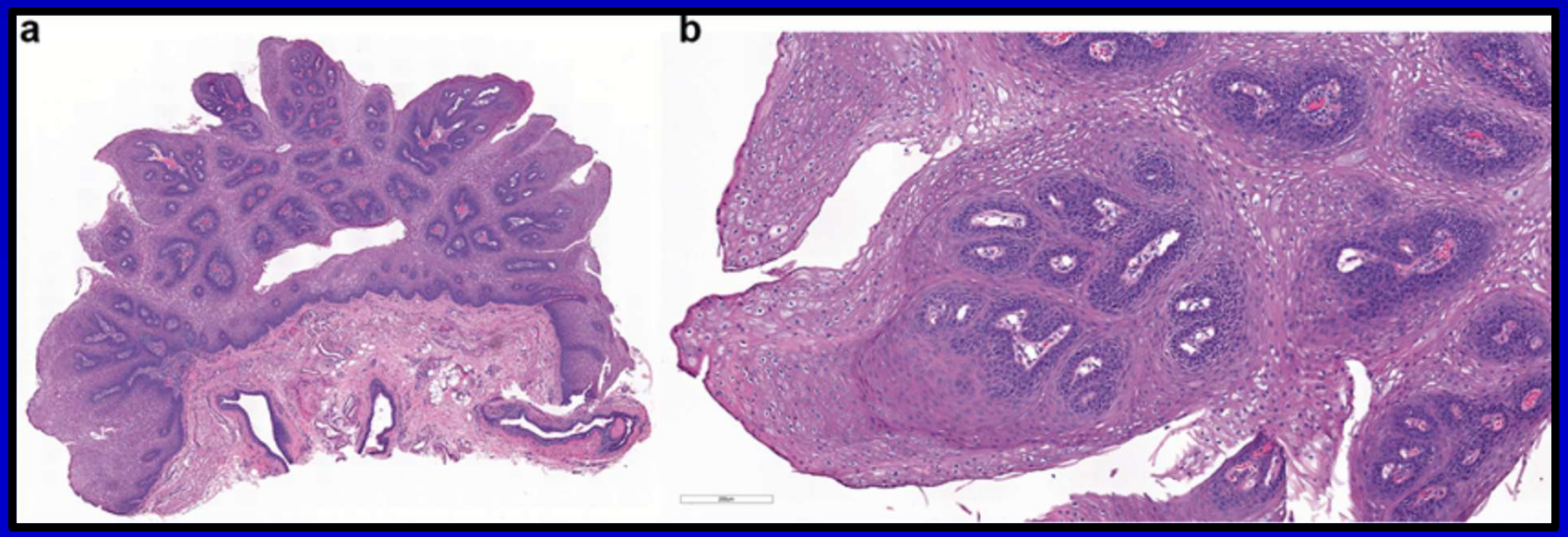


Image from Contemporary Oral Medicine

Squamous papilloma

- Diagnosis and treatment
  - → Clinical
  - → Excision is curative

Verruca vulgaris

- Aetiology and pathogenesis
  - → Benign lesions caused by the HPV (Types 1 and 57 and also 6 and 11)

Verruca vulgaris

- Clinical presentation
  - → Similar to squamous papilloma
  - → May be more round or only slightly raised

Image from Contemporary Oral Medicine

Verruca vulgaris

- Histopathology
  - → As for squamous papilloma
  - → Larger koilocytes

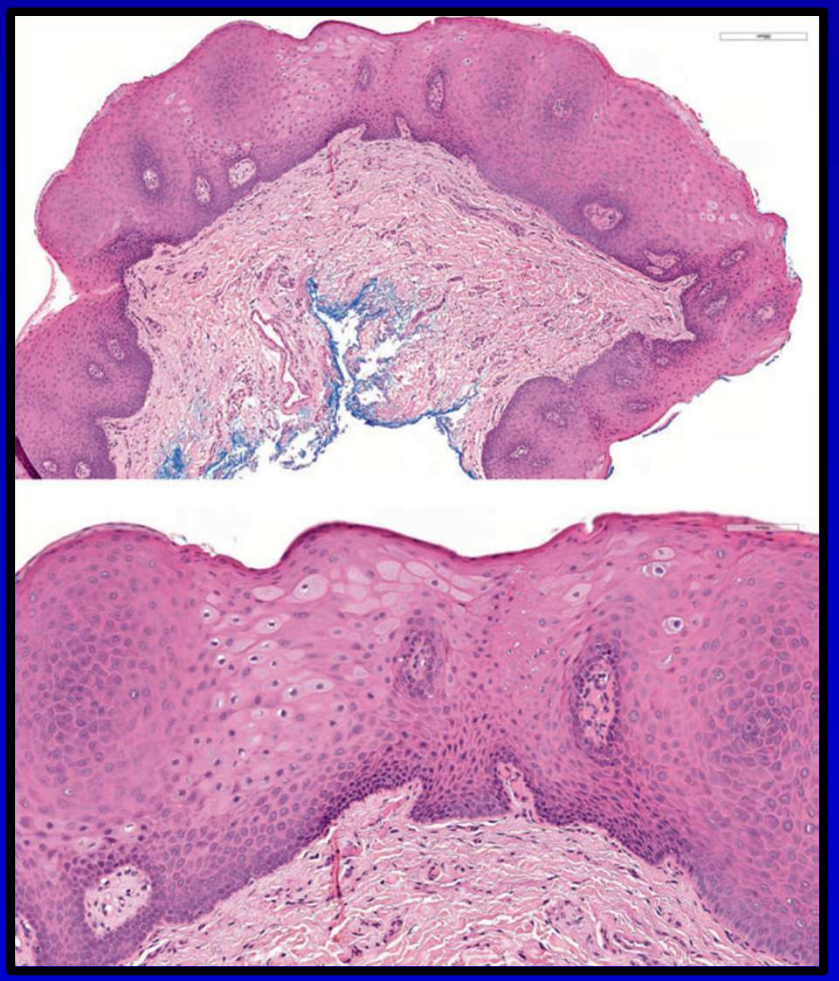


Image from Contemporary Oral Medicine

Verruca vulgaris

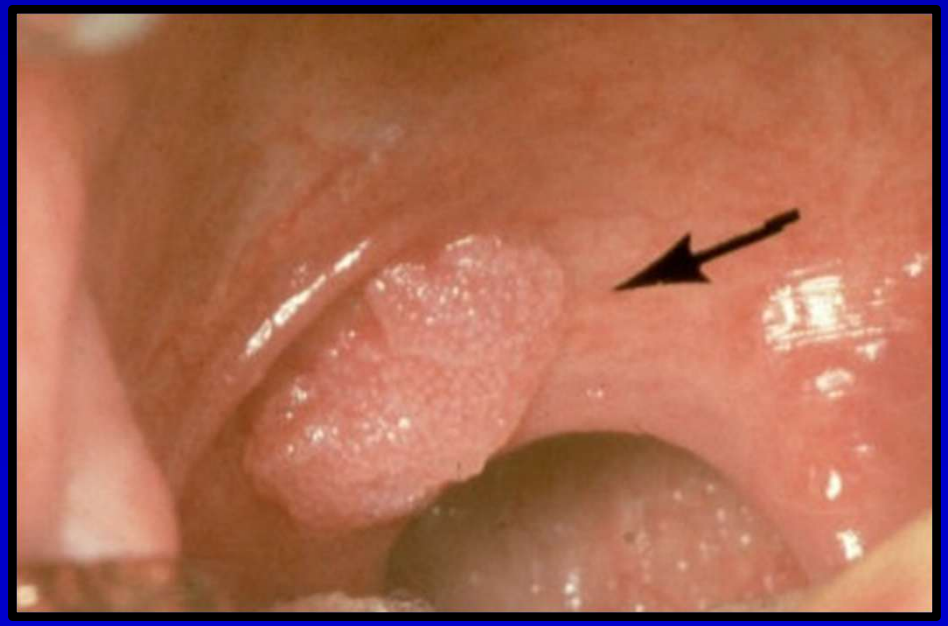
- Diagnosis and treatment
  - → Clinical
  - → Excision is curative

Condyloma acumulatum

- Aetiology and pathogenesis
  - → Benign lesions caused by the HPV (Types 2, 6 and 11)
  - → Sexually transmitted disease

Condyloma acumulatum

- Clinical presentation
  - → Numerous pink nodules that grow and coalesce



Photos courtesy of Dr JE Bouquot

Condyloma acumulatum

- Histopathology
  - → Papillary projections
  - → May be keratinized or non-keratinized
  - → Koilocytosis

Condyloma acumulatum

- Diagnosis and treatment
  - → Clinical
  - → Excision is curative

Condyloma acumulatum

- Significance in children?

Condyloma acumulatum

- Significance in children?

Physiologic (racial) pigmentation

- Aetiology and pathogenesis
  - → Due to increased melanin production

Photos courtesy of Dr JE Bouquot

Physiologic (racial) pigmentation

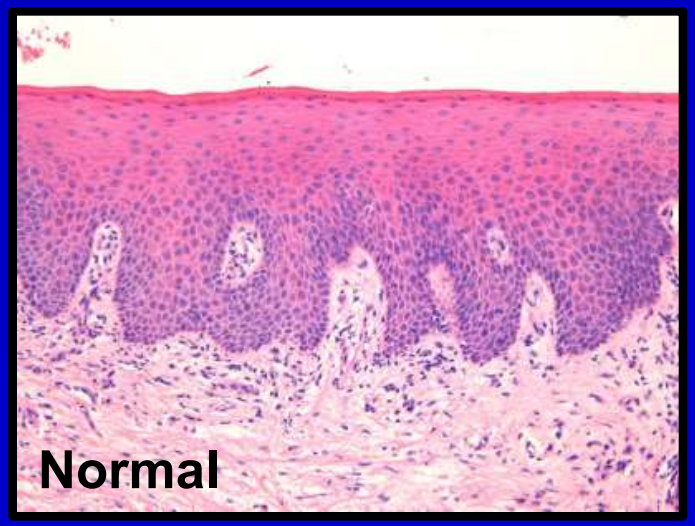
Photos courtesy of Dr JE Bouquot

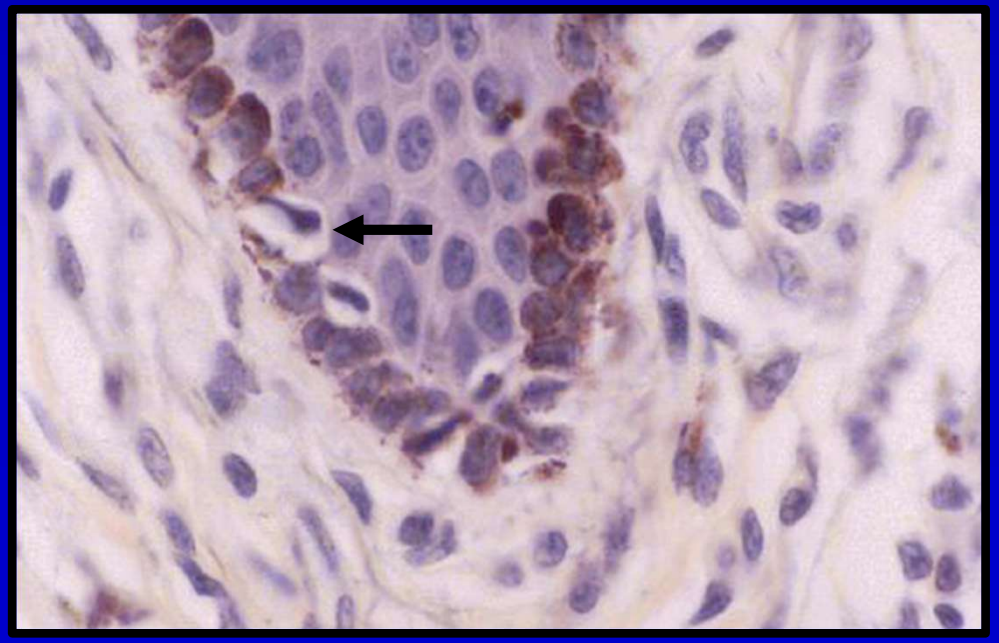
Physiologic (racial) pigmentation

- Clinical presentation
  - → Symmetric
  - → No alteration of tissue architecture
  - → Any age
  - → May not correspond to degree of cutaneous pigmentation
  - → No gender predilection
  - → Any location

Physiologic (racial) pigmentation

- Histopathology
  - → Increased melanin production
  - → Melanin found in basal keratinocytes and subjacent connective tissue macrophages





Physiologic (racial) pigmentation

- Differential diagnosis
  - → Smoking associated melanosis
  - → Addison's disease
  - → Peutz-Jeghers syndrome
  - → Melanoma
  - → Biopsy may be required if atypical clinical features

Physiologic (racial) pigmentation

- Treatment
  - → None required

Oral melanotic macules

- Aetiology and pathogenesis
  - → Focal pigmented lesion that may represent:
    1. *Intraoral freckle*
    2. *Post-inflammatory pigmentation or*
    3. *Systemic disease*

Oral melanotic macules

- Clinical presentation
  - → Benign
  - → Any oral surface may be affected
  - → Asymptomatic

Oral melanotic macules

Oral melanotic macules

Photos courtesy of Dr JE Bouquot

Oral melanotic macules

Photos courtesy of Dr JE Bouquot

Oral melanotic macules

Generalized pigmentation due to Addison disease
Rajesh Kumar, Sita Kumari, Pradeep Kumar Ranabijuli
Dermatology Online Journal 14 (2): 13

Oral melanotic macules

- Histopathology
  - → Melanin accumulation in basal keratinocytes
  - → Normal numbers of melanocytes

Oral melanotic macules

- Differential diagnosis
  - → Amalgam tattoos
  - → Nevi
  - → Malignant melanoma

Oral melanotic macules

- Treatment
  - → Biopsy may be required to establish definitive diagnosis
  - → No treatment required

Melanocytic nevus

- Aetiology and pathogenesis
  - → Collections of nevus cells
  - → Found in epithelium or supporting connective tissue or both
  - → Rare
  - → May present at any age

Melanocytic nevus

- Clinical presentation
  - → Small elevated papules or nodules
  - → May be non-pigmented
  - → Palate most common site

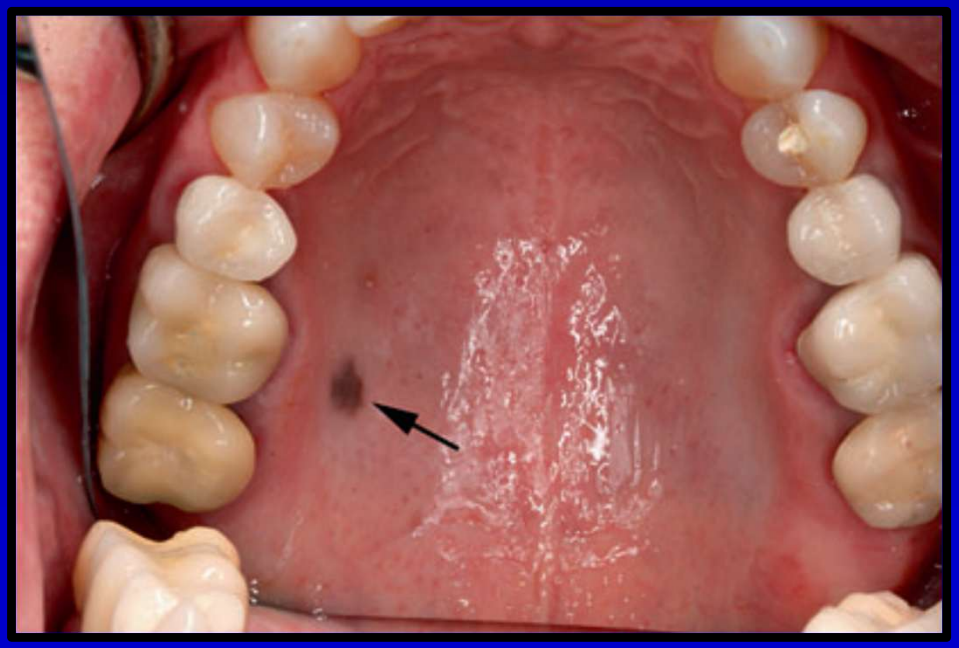
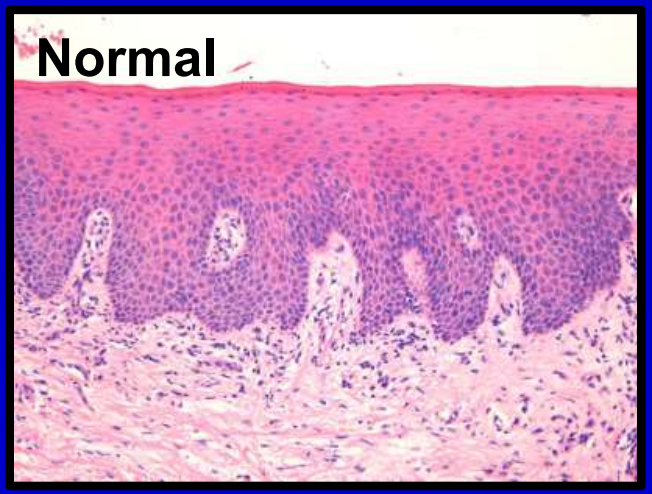


Image from Contemporary Oral Medicine

Melanocytic nevus

- Histopathology
  - → Several subtypes based on location of nevus cells
  - → Nests of pigmented nevus cells



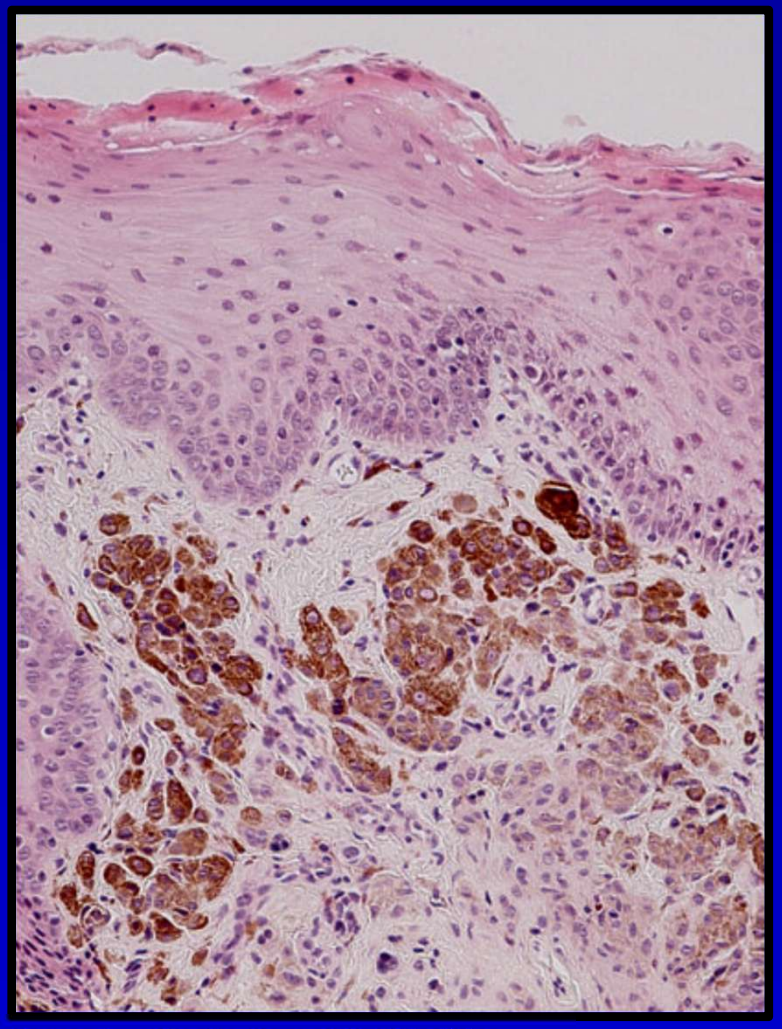


Image from Contemporary Oral Medicine

Melanocytic nevus

- Differential diagnosis
  - → Melanotic macule
  - → Amalgam tattoo
  - → Melanoma

Melanocytic nevus

- Treatment
  - → Excision

Image from Contemporary Oral Medicine

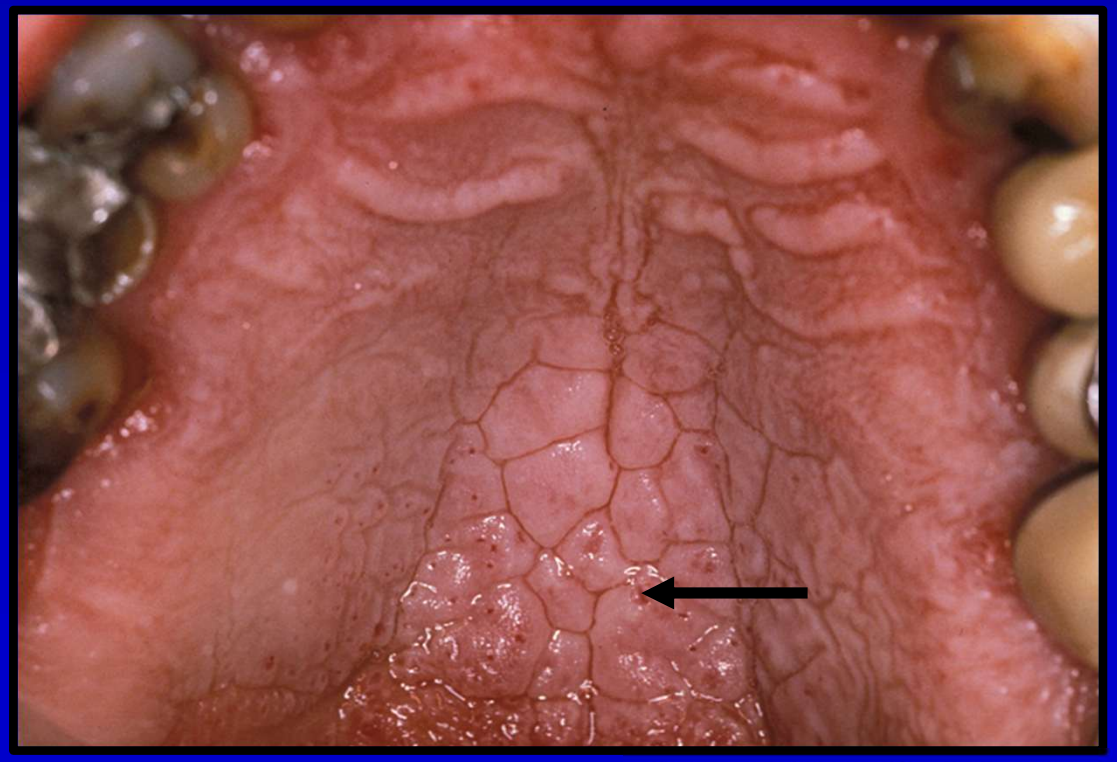
Nicotine stomatitis

- Aetiology and pathogenesis
  - → Tobacco related form of hyperkeratosis

Photos courtesy of Dr JE Bouquot

Nicotine stomatitis

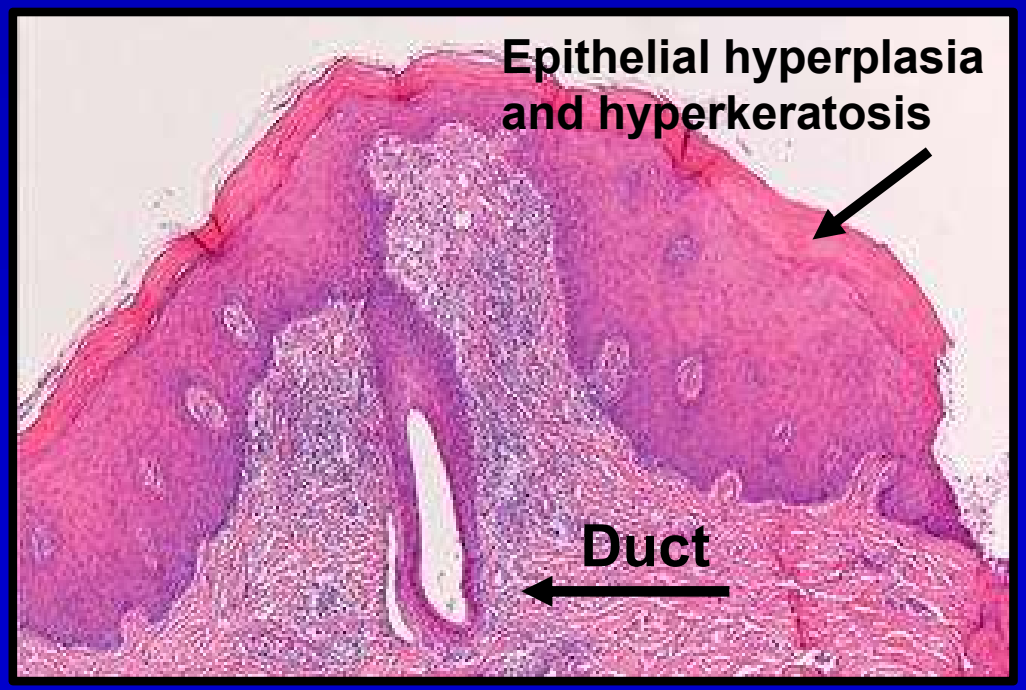
- Clinical presentation
  - → Hyperkeratosis
  - → Inflamed salivary duct orifices



Photos courtesy of Dr JE Bouquot

Nicotine stomatitis

- Histopathology
  - → Epithelial hyperplasia and hyperkeratosis
  - → Salivary glands show inflammatory salivary squamous metaplasia of excretory ducts



Nicotine stomatitis

- Treatment
  - → Malignant transformation rare
  - → Indicator of tobacco use

Hairy tongue

- Aetiology and pathogenesis
  - → Filiform papillary overgrowth
  - → Numerous predisposing factors
    - ✓ Alteration in microbial flora

Hairy tongue

- Clinical presentation
  - → Enlarged filiform papillae – dense hairlike
  - → Asymptomatic
  - → Cosmetic problem

Photos courtesy of Dr JE Bouquot

Hairy tongue

- Histopathology
  - → Elongated filiform papillae
  - → Surface contamination by clusters of micro-organisms and fungi
  - → Underlying lamina propria is mildly inflamed

Hairy tongue

- Diagnosis
  - → Clinical

Hairy tongue

- Treatment
  - → Identify cause
  - → Gentle scraping / sodium bicarbonate

Summary

- Common problems occur commonly!
- Important to recognize benign pathosis for what they are
- Appropriate referral pathways