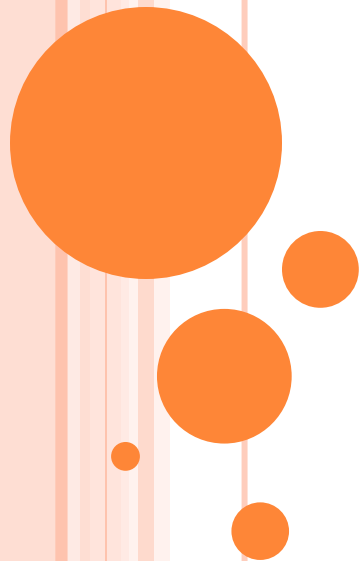


BENIGNE EPITHELIAL LESIONS

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ITEMS COVERED IN THIS LECTURE

- **SQUAMOUS PAPILLOMA**
- **KERATOACANTHOMA**
- **MELANOTIC MACULES**
- **SMOKER'S MELANOSIS**
- **NEVUS**
- **ACTINIC LENTIGO**
- **PEUTZ-JEGHERS SYNDROME**
- **MELASMA**
- **NICOTINE STOMATITIS**



SQUAMOUS PAPILLOMA

- A benign exophytic papillary growth of stratified squamous epithelium.
- Causative agent: some reports consider HPV as a causative agent



HPV comprises a large family (more than 100 types) of double-stranded DNA viruses of the papovavirus. The virus is capable of becoming totally integrated with the DNA of the host cell, and at least 24 types are associated with lesions of the head and neck.

Viral subtypes 6 and 11 have been identified in up to 50% of oral papillomas



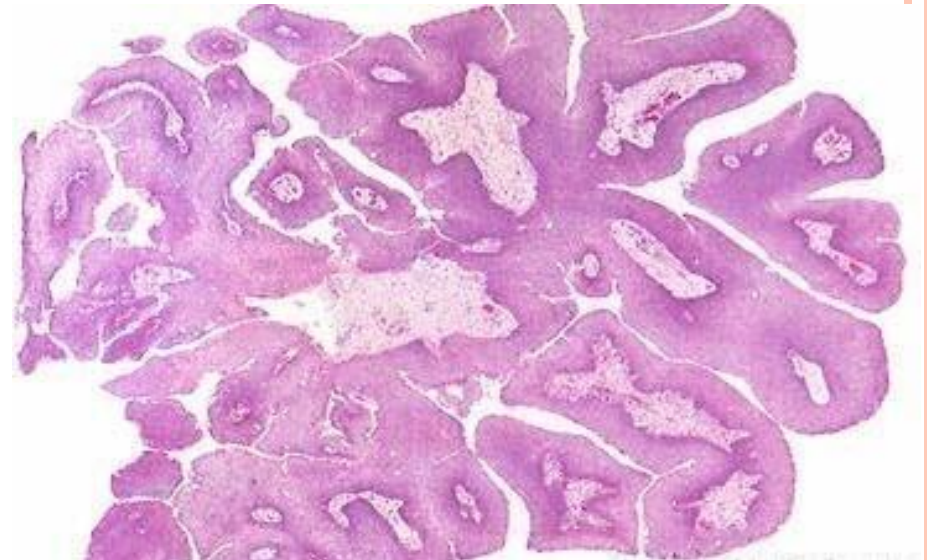
CLINICAL FEATURES:

- **Exophytic papillary lesion (sessile or pedunculated)**
- **less than 1 cm diameter**
- **white (keratinized) or pink (nonkeratinized)**
- **solitary lesion**
- **soft palate, uvula, and ventral and dorsal surfaces of the tongue, gingiva, and buccal mucosa**

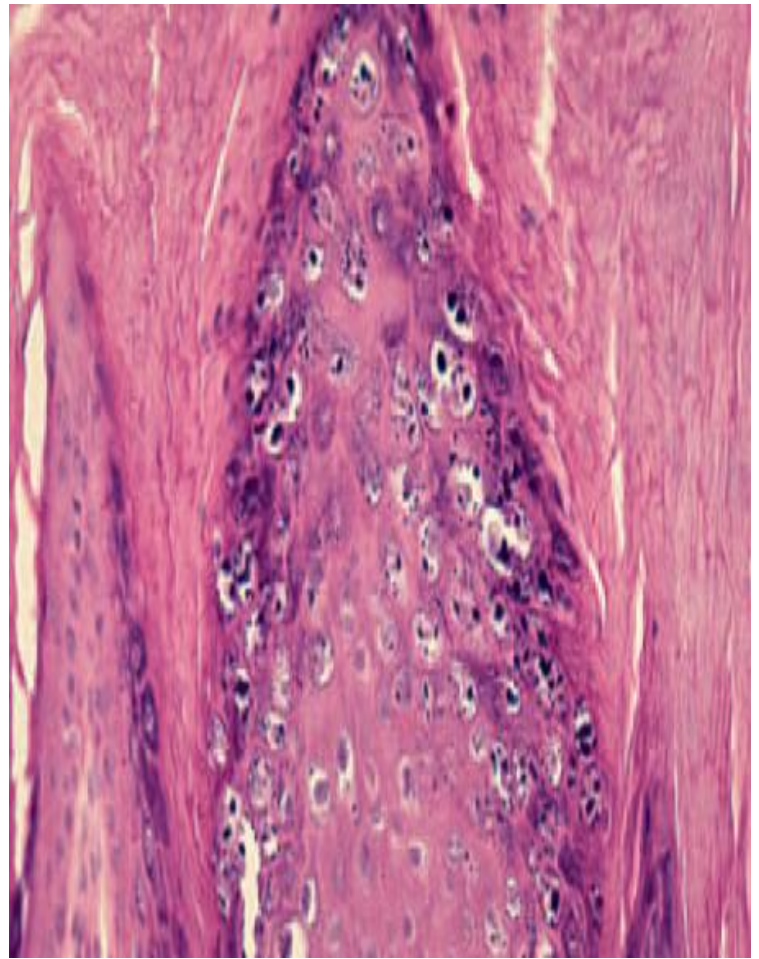


HISTOPATHOLOGY

- A thick papillary layer of keratinized or nonkeratinized squa. epi.
- a central core of fibrovascular CT
- The papillary projections may be long and fingerlike or short, rounded, and blunt.
- The epithelium generally exhibits a normal maturation pattern.



- It demonstrates basilar hyperplasia and mitotic activity, which can be mistaken for mild epithelial dysplasia.
- Koilocytes, virus-altered epithelial clear cells with small dark (pyknotic) nuclei, are sometimes seen high in the prickle cell layer.



- Koilocytes are HPV-altered epithelial cells with perinuclear clear spaces and small, dark nuclei (pyknosis).



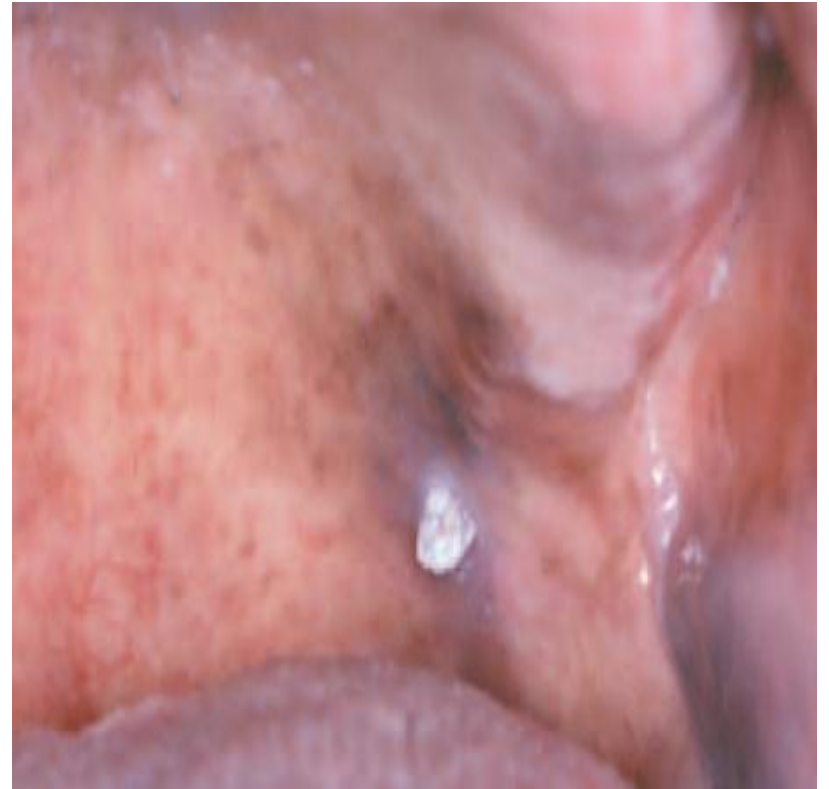
TREATMENT:

- **The treatment of squamous papilloma consists of simple surgical excision of the base of the lesion and a small area of surrounding normal tissue. Recurrence is uncommon**



VERRUCA VULGARIS (COMMON WART)

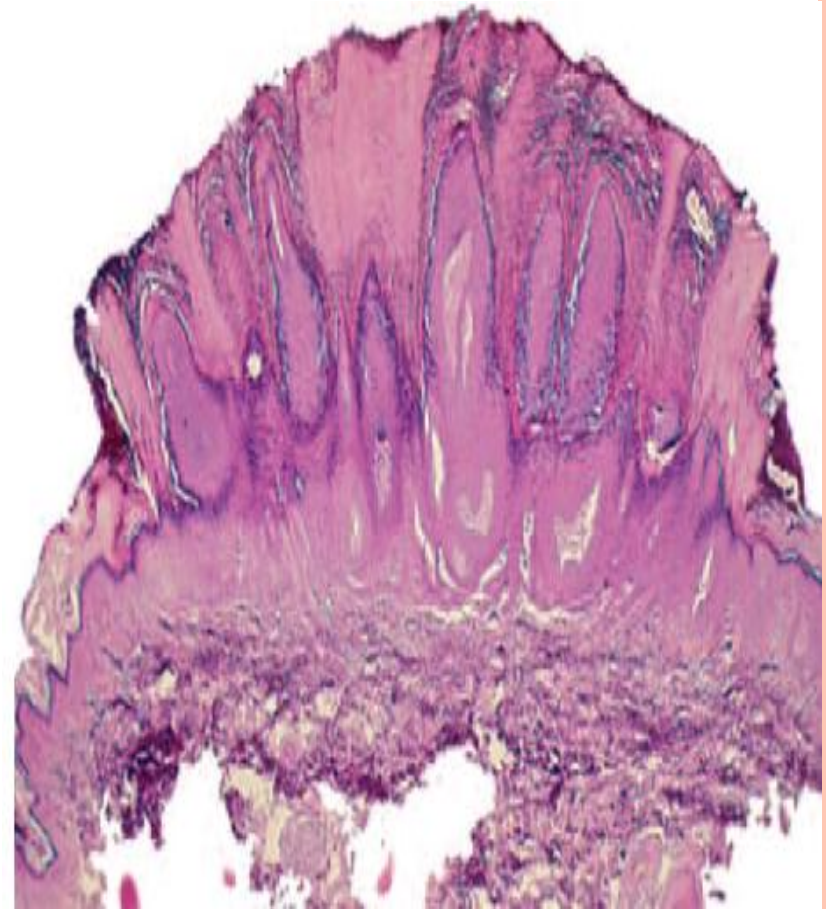
- is a benign, virus-induced, focal hyperplasia of stratified squamous epithelium. One or more of the associated human papillomavirus (HPV) types 2, 4, 6, and 40 are found in virtually all examples.



- **Verruca vulgaris is contagious and can spread to other parts of a person's skin or mucous membranes by way of autoinoculation. It infrequently develops on oral mucosa but is extremely common on the skin.**



- the verruca appears as a painless papule or nodule with papillary projections Multiple or clustered lesions are common.
- On occasion, extreme accumulation of compact keratin may result in a hard surface projection several millimeters in height, termed a cutaneous horn or keratin horn



TREATMENT AND PROGNOSIS

- Skin lesion treated by topical salicylic acid, topical lactic acid, or liquid nitrogen cryotherapy.
- Skin lesions that recur or are resistant to standard therapy may be treated by alternative methods, such as intralesional bleomycin, topical or photodynamic therapy.
- Oral lesions are usually surgically excised, or may be destroyed by a laser, cryotherapy, or electrocautery.
- Recurrence is seen in a small proportion of treated cases.



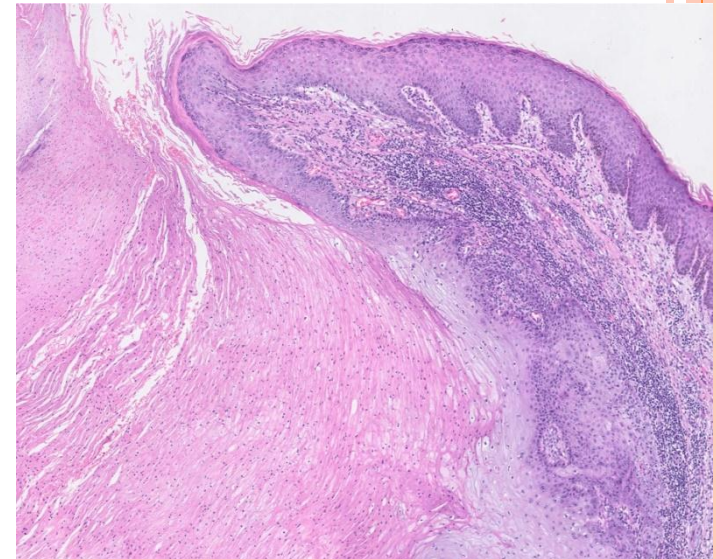
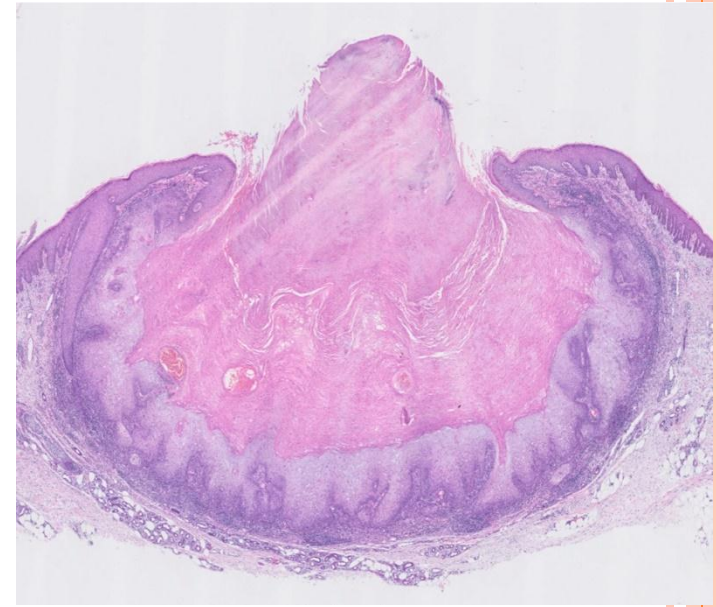
KERATOACANTHOMA:

- A benign endophytic epi. growth
- well-circumscribed keratin-filled crater on sun-exposed skin.
- Developed 1 to 2 months nodules with a central keratin filled crater on the faces of patients 50 years of age and older.
- The male to female ratio 2:1. Although most lesions occur on hair-bearing skin (cheeks, nose, eyelids, ears), they also occur on the lower lip.



HISTOPATHOLOGY :

- It needs closer observation
- Well-differentiated spinous cells epi. with abundant cytoplasm and minimal nuclear pleomorphism, infrequent mitotic figures, and an absence of abnormal mitotic figures.
- Moderate infiltrate of chronic inflammatory cells in CT.
- TREATMENT : regress spontaneously if left untreated
- Surgical removal before they reach their maximum size of 2.0 to 2.5 cm.



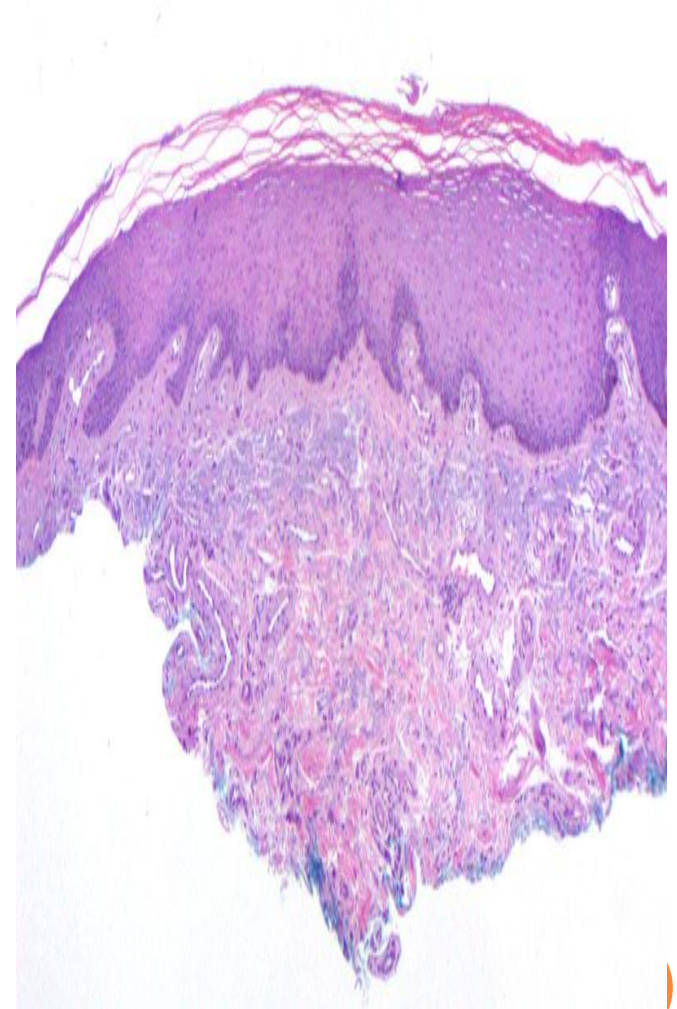
MELANOTIC MACULES:

- **Reactive small lesion on lip termed a labial melanotic macule and intraoral lesion an oral melanotic macule.**
- **Many melanotic macules of the mucosa represent foci of post-inflammatory pigmentation.**



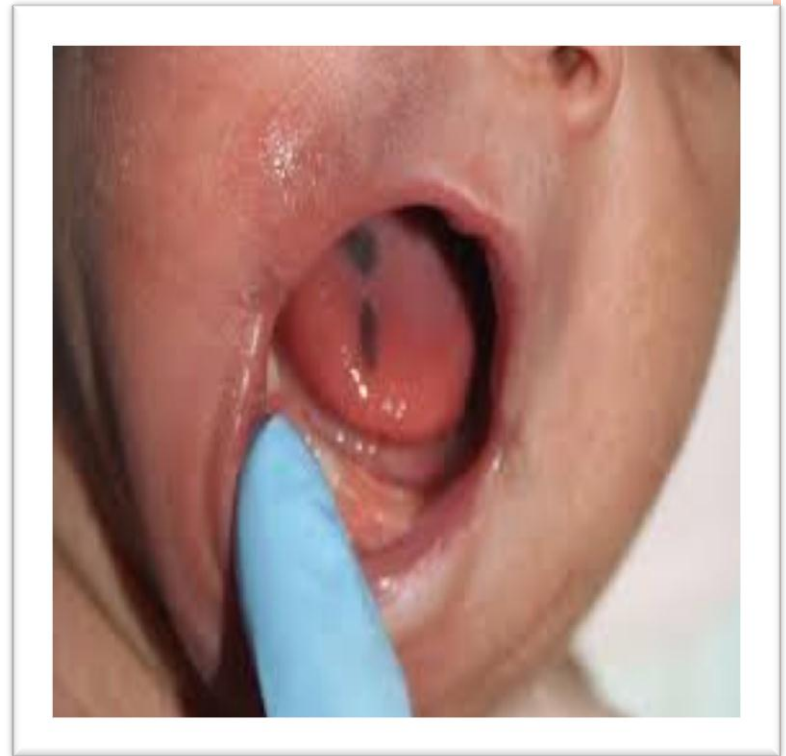
HISTOPATHOLOGY:

- They are characterized by an increase in melanin granules in the basal cell layer.
- The melanocytes are confined to the basal cell region and are usually within the normal numeric range. Nuclear atypia is absent.



TREATMENT:

- Quickly developed lesion should be excised to establish the actual diagnosis and to rule out the possibility of melanoma



SMOKER'S MELANOSIS:

- Irregular brown macular pigmentation of the oral mucosa resulting from prolonged tobacco smoking.
- Smoking stimulates melanin production and more intense in female use contraceptive pills.
- maxillary and mandibular anterior labial gingiva.



- **Histologic features similar to those found in a melanotic macule.**
- **The most effective treatment for smoker's melanosis is to stop smoking.**
- **Stop smoking will usually result in elimination of the pigmentation within a few months. If the pigmentation persists after a period of not smoking, a biopsy to assess the lesion is advisable.**



PHYSIOLOGICAL AND RACIAL PIGMENTATION

- **This is the most common cause of oral pigmentation. Gingiva and inner aspect of lips is typically spared. It is commoner in dark skin.**



AMALGAM TATTOO

- Fragments of amalgam embedded in the oral mucosa.
- It seen as brown or black granules deposit along collagen bundles and around small blood vessels as amalgam granules in the macrophages or giant cells.
- Dense tattoos may be radiopaque.
- Excision is necessary to exclude a melanoma.



- A benign, exophytic, usually pigmented, congenital lesion of skin or mucosa composed of focal collections (nests) of rounded melanocytes (nevus cells)
- It classified as intradermal (mucosal), junctional, or compound.

NEVUS:

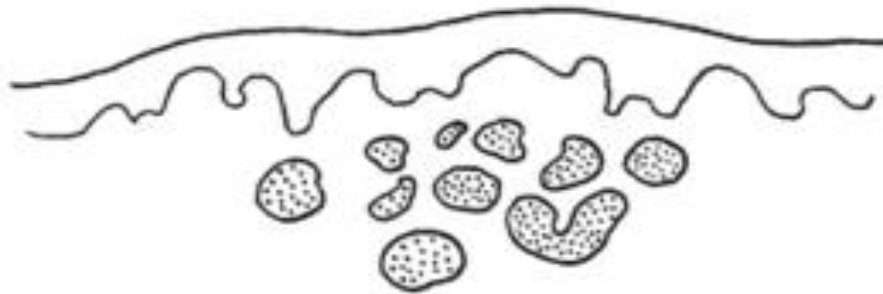


INTRADERMAL NEVUS

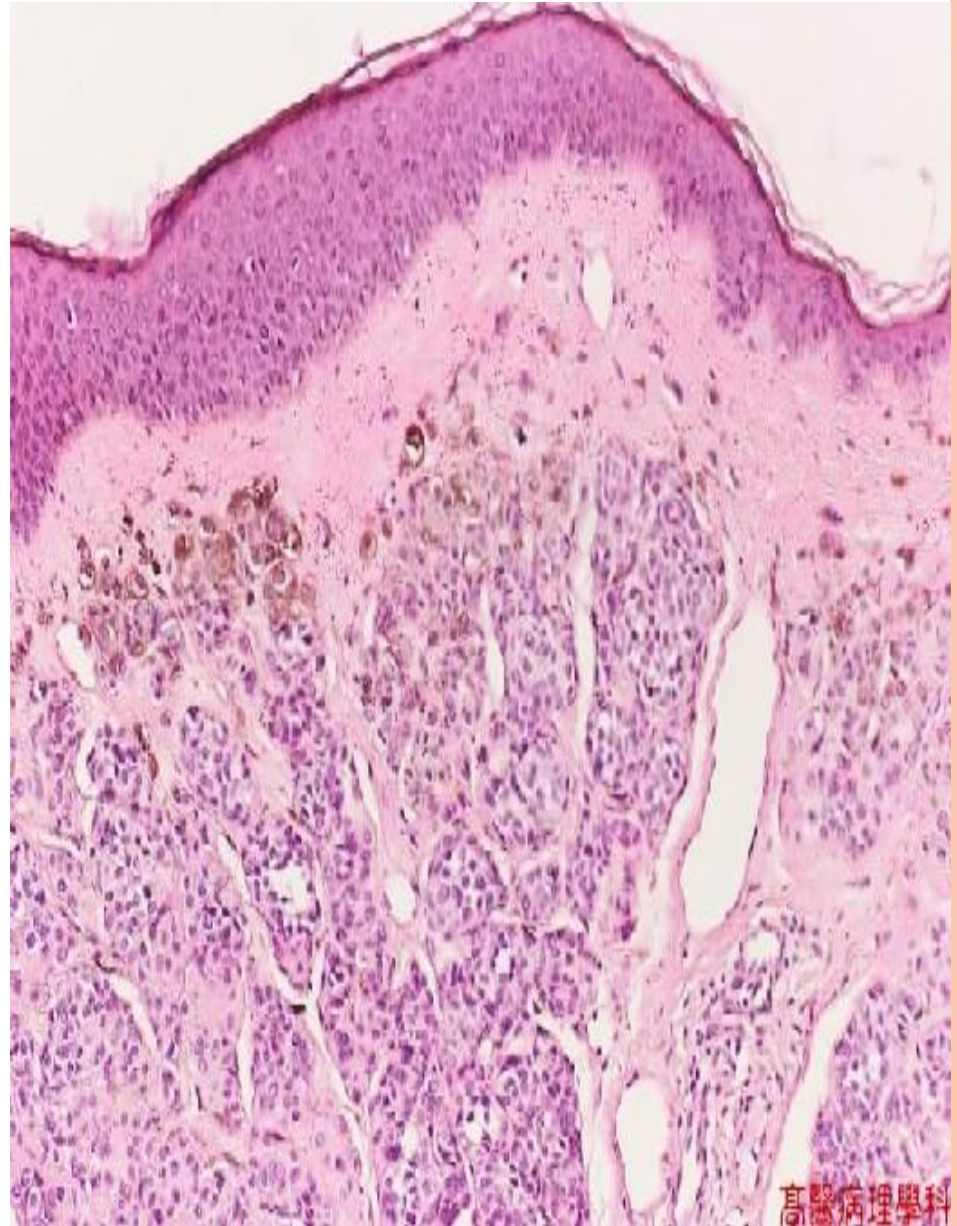
INTRAMUCOSAL NEVUS

- It is commonly termed a mole. Oral lesion is uncommon
- It appears as an asymptomatic, pigmented, brown to black, slightly elevated or flat macule on the hard palate or gingiva. The lesion grows very slowly and generally measures less than 1 cm in diameter.

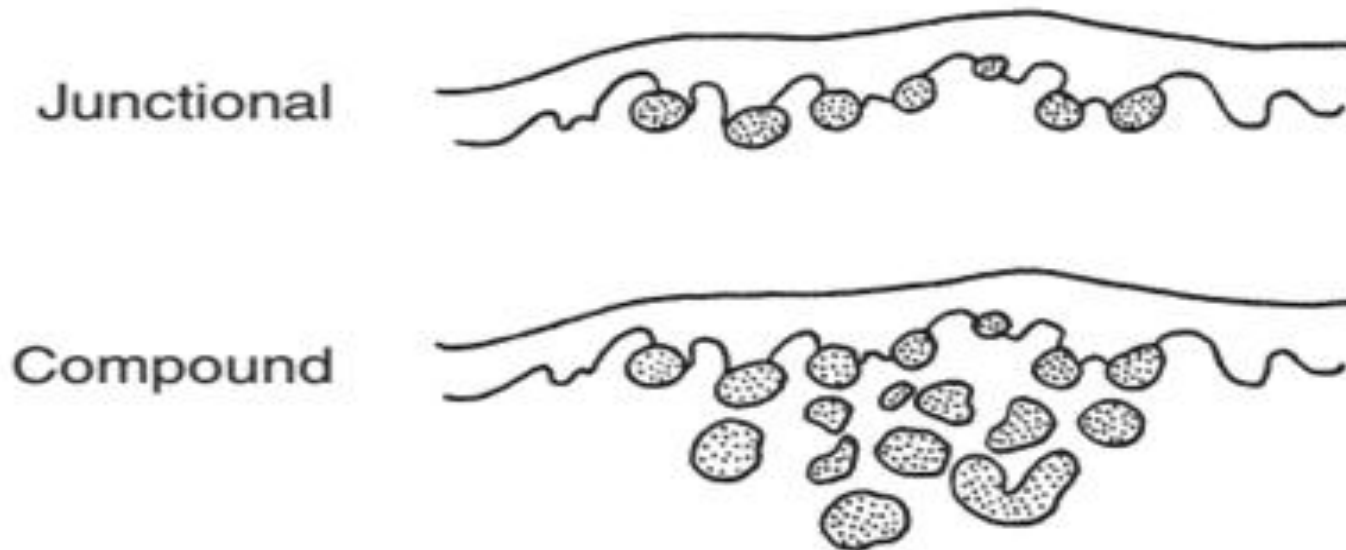
Intramucosal



- It characterized by clustered of nests, cords or sheets of nevus cells confined to the connective tissue. The morphology of the cells and the amount and distribution of melanin are variable and mitotic figures are usually absent.

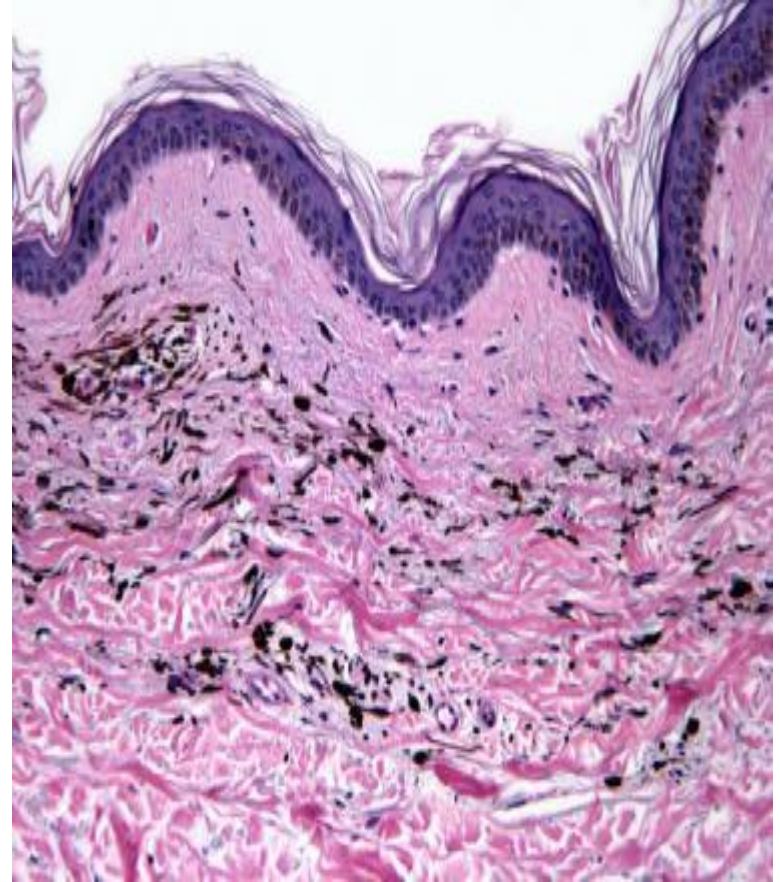


If the lesional cells are found at the junction between the epithelium and the connective tissue, it is known as a junctional nevus. If the nevus cells begin to drop off into the underlying connective tissue, the lesion then is called a compound nevus



- Benign dark blue papule or as a flat macule occurs most commonly on the hard palate.
- The cells in the blue nevus are spindled dendritic cells rather than rounded or epithelioid and are confined to the connective tissue rather than being arranged in separated rounded clusters. The blue nevus has no tendency to undergo malignant transformation.

BLUE NEVUS:



CONGENITAL MELANOCYTTIC NEVUS

- It is large nevus appears as a brown to black plaque, usually with a rough surface or multiple nodular areas and darker with age.
- A common feature is the presence of hypertrichosis (excess hair) within the lesion, which may become more prominent with age (giant hairy nevus).



- **TREATMENT:**
- **A solitary pigmented lesion of the oral mucosa, particularly on the hard palate, should be excised and submitted for histopathologic examination.**



ACTINIC LENTIGO

- Solar lentigo, senile lentigo, age spot, or liver spot.
- It is a benign pigmented multiple macular on sun-exposed skin, primarily on the face, exterior surfaces of the forearms, and most commonly on the dorsal surfaces of the hands.



- Sunlight is the contributing factor.
- Age related lesions are uncommon before the 5th decade of life.
- It does not undergo malignant transformation.



- **bulbous and elongated rete ridges with a marked increase in melanin within the basal keratinocytes.**
- **No treatment of actinic lentigo is required. esthetic reasons with topical retinoic acid can reduce the color intensity of the lesions. Laser treatment has also been used.**



PEUTZ-JEGHERS SYNDROME:

- It is uncommon autosomal dominant disorder characterized by multiple intestinal polyps (intestinal polyposis)
- freckle-like pigmentation of the skin in perioral areas
- Recognition of the clinical characteristic of the oral and skin lesions can lead to early diagnosis of the disorder and evaluation of the GIT



- **The pigmented macules typically develop during the first decade of life and can be widespread, affecting the hands and feet and perioral skin as well as the oral mucosa.**
- **Cutaneous macules usually fade after puberty but the oral macules persist**



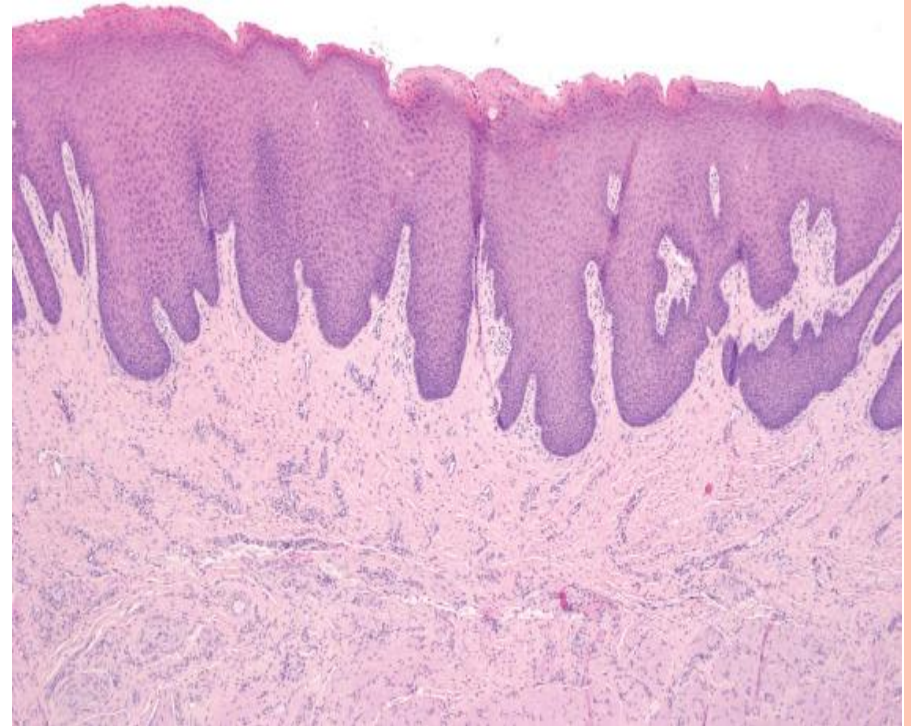
MELASMA: THE MASK OF PREGNANCY

- It is symmetrical hyperpigmentation of the sun-exposed skin of the face and neck.
- increase in melanin within basal keratinocytes. The superficial connective tissue may also display melanin within the phagocytes (melanin incontinence).
- Topical treatment with 3% hydroquinone and retinoind. The pigmentation can spontaneously resolve after cessation of oral contraceptives.



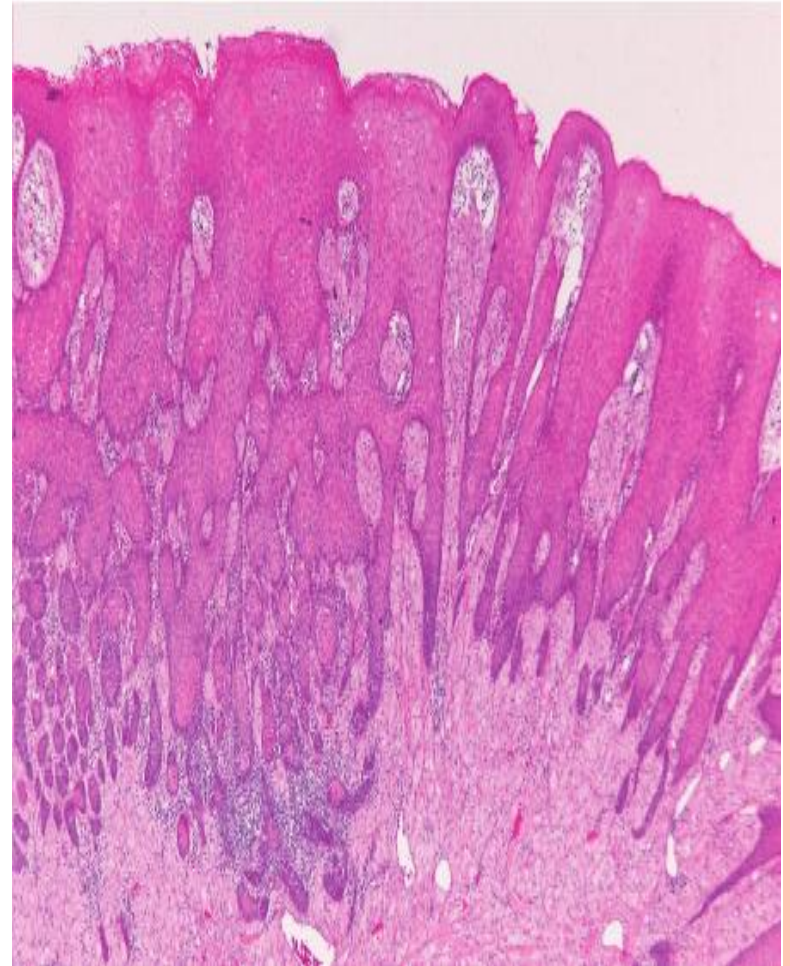
ACANTHOSIS:

- Excessive thickening of the spinous layer of squamous epithelium, resulting in broadening and elongation of rete ridges.
- It develops in response to chronic irritants, such as ill-fitting dentures, smoking or chewing tobacco, and infections such as chronic candidiasis



PSEUDOEPITHELIOMATOUS HYPERPLASIA

- An excessive benign proliferation of squ. Epi. that histologically resembles the proliferation seen in a SCC.
- It is commonly seen in inflammatory papillary hyperplasia (palatal papillomatosis), chronic hyperplastic candidiasis, granular cell tumor, and blastomycosis.



NICOTINE STOMATITIS:

- **White lesion combination of hyperkeratosis and acanthosis palate, the buccal mucosa, in chronic pipe smokers**
- **Dilated salivary gland duct exhibiting squamous metaplasia of the ductal lining. CT exhibits variable degrees of chronic inflammation.**
- **TREATMENT: it rapidly resolves when the smoking habit stops**



Suggestive Reading

Brad W Neville, Douglas D Damm, Carl M. Allen, Jerry E Bonguot. Oral And Maxillofacial Pathology, 4th Edition, Elsevier, 2015



