• Squamous papilloma
• Squamous acanthoma
• Keratoacanthoma
• Verruca vulgaris
• Condyloma acuminatum
• Focal epithelial hyperplasia
• Sino nasal papilloma
• Exophytic growth made up of numerous small finger like projections which result in a lesion with a roughened verucous or “cauliflower” like surface.
• Painless pedunculated tumor or rarely sessile.
• Few millimeters to centimeters.
• Causative factors-HPV -6 and 11
Cowden’s syndrome
{multiple hamartomas neoplasia syndrome}

- Papilloma like or papillomatous lesions
- Fibromas in oral cavity
- Facial trichilemmomas
- Abnormalities in GIT, CNS, thyroid and musculoskeletal abnormalities
• Long, thin finger-like projections made up of continuous layer of stratified squamous epithelium containing a thin central connective tissue core that support the nutrient blood vessels.
• Proliferation of spinous cells in a papillary pattern.
• Koilocytes {HPV altered epithelial cells with perinuclear spaces and nuclear pyknosis.}
- complete excision including the base into which the pedicle or stalk inserts
- Its malignant potential is rare
- Alternative treatment includes conservative surgical excision or curettage but liq nitrogen cryotherapy & topical application of keratolytic agent are also effective.
- Recurrence is rare.
• Selfhealing carcinoma, molluscum pseudocarcinomatous.
• Clinically and histologically resembles squamous cell carcinoma.
• Common low grade malignancy that originates in the pilosebaceous glands.
• Chemical carcinogens-tar and pitch
• Sunlight
• Trauma, HPV-9, 11, 13, 16, 18, 24, 25, 33, 37, 57.
• Genetic factors-chromosomal aberrations
• Gains on 8q, 1p, 9q with deletions on 3p, 9p, 19p and 19q.
• t(2;8)
• Older age groups
• Male preponderence
• Less common in dark skinned persons
• Common site- sun exposed areas - face, neck and dorsum of the upper extremities.
• Oral cavity- lips and vermillion border.
Solitary lesions, begin as firm, round, skin colored or reddish papules which progress into dome-shaped nodules with a smooth shiny surface with a central crateriform ulceration or keratin plug that may project like horn.
Keratoacanthoma

Cup shaped symmetry and verruciform surface
Differential diagnosis:
- Keratoacanthoma
- Squamous cell carcinoma

Tissue of origin:
- Hair follicle epithelium

Main Pathologic Process:
- Benign proliferation

Treatment:
- regresses spontaneously if left untreated
Verruca vulgaris

Intra-Oral
Verruca vulgaris
• One of the most common sexually transmitted diseases in the world.

• Etiology – HPV - 6, 11, 30, 42, 43, 45, 46, 51, 54, 55 and 70.
Inoculation in epithelium

Viral Replication and transcription in basal cells

- Virions assemble in cytoplasm of epithelial cells
- Release of virions along with desquamated cells

- Acanthosis, hyperkeratosis

- Koilocytes in granular cells
Soft pink nodules proliferate and coalesce to form diffuse pappilomatous clusters.

Site: anogenital region skin.
Oral site: dorsal tongue, buccal mucosa, palate, gingiva or alveolar ridge.
Koilocytes
- Virus induced localized proliferation of oral sq epi (HPV 13 & 32)

C/F:
- Childhood condition
- Labial, buccal and lingual mucosa
- Multiple, soft non-tender flattened or rounded papules clustered together
- Cobble stone appearance
• Acanthosis of epithelium
• Proliferation upwards
• Rete ridges are at the same depth and are widened and confluent
• Mitusoid cell
• Koilocytic changes

Tests:
• DNA in-situ hybridisation
• IHC
• catagorised as *hamartomas*, nevi are they are benign proliferation of nevus cells in either connective or epithelial tissue.
• More common in *whites*.
• They are classified as *congenital or acquired*.
• On their histologic location basis, they are classified as *junctional nevi: when nevi cells are limited to the basal cell layer.*
  *Compound nevi: when the cells are in epidermis  dermis.*
  *Intradermal nevi or common mole: nests of nevus cells are entirely in the dermis.*
Junctional nevi that are first observed in infants and young adults typically mature into compound nevi, and during later adulthood into intramucosal nevi. As nevi cells penetrate into the mucosa, their pigmentation diminishes. Most common of all nevi are the intramucosal nevi which account for 50% of all oral nevi followed by blue nevi (25 –36%).
The pigmented nevus is characterized by a proliferation of nevus cells microscopically within the underlying connective tissue.

**Clinical Features:**

- Most common lesion of the skin & mucosa.
- Exhibit as several or dozen scattered over the body.
- Smooth, flat lesion, may be elevated above the surface.
- May or may not show brown pigmentation.
- Often shows strands of hair growing from the surface.
- Common oral sites are hard palate & buccal mucosa.
The pigmented nevus is characterized by a proliferation of nevus cells microscopically within the basal cell layer of the surface epithelium.

Clinical Features:
- usually on the skin and occasionally on the oral mucosa: hard palate or gingiva brown to black macular lesion
- nest of nevus cells in the basilar region of the epithelium epithelial rete pegs
- In the junctional nevus, the **zone of demarcation between connective tissue and the overlying epithelium is absent and the cells contact and seem to blend with the surface epithelium.**
- Overlying epithelium usually thin and irregular and shows the so called **abtropfung or dropping off effect.**
Main Pathologic Process: 
*benign proliferation*

Treatment:
 diagnostic *excisional biopsy*

Prognosis:
 may transform to melanoma
does not recur after excision
• The pigmented nevus is characterized by a proliferation of nevus cells microscopically within the basal cell layer of the surface epithelium and the underlying connective tissue.

Clinical Features:
more common on skin than oral mucosa 
pigmented papule or a macule 
hard palate or gingiva
Differential Diagnosis:
- compound nevus
- melanotic macule
- amalgam tattoo
- melanotic macule

Tissue of Origin:
- epithelium and connective tissue
Histologic Features:
nevus cells in the basal region and adjacent connective tissue
• Tissue of Origin: epithelium and connective tissue
• Main Pathologic Process: benign proliferation
• Treatment: diagnostic excisional biopsy
• Prognosis: does not recur
- A benign pigmented lesion that presents as a dark blue dome-shaped papule or as a flat macule on the skin or mucosa.

Clinical Features:
- children & young adults
- female predilection
- most often on the hard palate
- 1-3 cm in diameter
- usually solitary
- elevated, smooth-surfaced papules or plaques that are gray-blue to bluish black in color
Histologic Features:
- Melanin producing spindled and fusiform dendritic cells in the connective tissue parallel to the normal overlying epithelium.
- Melanin containing macrophages.
Differential Diagnosis:
- melanotic macule
- amalgam tattoo
- melanotic macule
Tissue of Origin:
- connective tissue
Main Pathologic Process:
- benign proliferation
Treatment:
- diagnostic excisional biopsy
Prognosis:
- no tendency for malignant transformation
• Hyperplastic condition of the epithelium of the mouth, skin and genitalia
• Accumulation of lipid laden histiocytes beneath the epithelium
• Not associated with virus
• Ass with immune response
Clinical features:
• Common in whites
• Age: 4 – 7th decade
• Female predilection
• Oral: gingiva and alveolar mucosa
• Manifestation: well demarcated, soft, painless sessile slightly elevated mass with the papillary surface
• Lesions < 2 cm
- Papillary acanthotic surface epithelium covered by thick para keratin
- Clefts or crypts present
- Numerous large macrophages with foamy cytoplasm confined to the conn tissue papillae – Xanthoma cells
- Diastase resistant, PAS +ve
• Common skin lesion of older people
• Benign proliferation of epidermal basal cells
• Hereditary
• Chronic sun exposure
Clinical features:
- Skin of face, trunk and extremities
- Above 4th decade
- Multiple lesions
- Small tan to brown macules indistinguishable from actinic lentigenous
- Fissured, pitted sharply demarcated plaques
- Adhered to the skin
- Dermatosis papillosa nigra
H/P:
- Basilar epithelial hyperplasia with varying degrees of keratinisation
- Acanthosis
- Papillomatosis
- Lesion exhibits deep keratin filled invaginations – Horn cysts, pseudo horn cysts
- Localized proliferation of sebaceous glands of skin
- Similar to Basal cell carcinoma
C/F:

- Adults 40 years above
- Skin of face, forehead, and cheek
- One or more soft non-tender papules, white or yellow
- Umblicated with small central depression from which a thick yellow white sebum can be expressed on compression
- Oral: BM – papule or nodular mass with a cauliflower-like appearance
Sebaceous hyperplasia
• Common small hyperpigmented macule of the skin
• Represents increased melanin production
• Face, arms, fair skinned blue eye persons
• Autosomal dominant
• Skin discoloration pronounced after sun exposure
• Age: 1st decade and fades as age advances
Brown macules
• Lentigo solaris; solar lentigo; senile lentigo
• Continuation of ephelis
• Benign brown macule that results from chronic UV light exposure to the skin
• Age: 6-7th decade; Whites affected
• Frequent on facial skin, dorsum of hands
• Multiple but individual lesions pigmented brown to tan macules, well demarcated but irregular borders
• >1 cm in diameter
• Adjacent lesions coalesce and new ones arise with age
• No change in color intensity after exposure of UV light
H/P:
- Rete ridges – elongated and club shaped
- Thinning of the epithelium above the connective tissue papillae
- Melanocytes
• Benign cutaneous melanocytic hyperplasia of unknown cause
• Skin not exposed to sunlight
• Color intensity does not change with exposure of sunlight
• Earlier stage of melanocytic nevus
Clinical features:

- Children
- Sharply demarcated macules with tan to dark brown color
- Reaches maximum size in a matter of months
H/P:
Increased benign melanocytes
Melasma (Mask of pregnancy)

- Symmetric hyperpigmentation of the sun-exposed skin of the face and neck
- Associated with pregnancy
- Use of oral contraceptives
• Focal melanosis
• Brown mucosal discoloration due to focal increase in the number of melanocytes
• Unknown cause
C/F:
• No age predilection
• Females
• Vermillion zone of lower lip- common site
• Solitary, well demarcated tan to brown asymptomatic round or oval macule
• Increase in melanin

• Melanin incontinence