

Verrucal & Papillary Lesions

Thursday 30/10/2019

Reactive/ Infective

- **Squamous cell Papilloma**
- **Papillary Hyperplasia**
- **Condylomata Lata**
- **Condylomata Accuminatum**
- **Focal Epithelial Hyperplasia**

Idiopathic

- **Pyostomatitis Vegetans**
- **Verruciform Xanthoma**

Neoplastic

- **Keratoacanthoma**
- **Verrucous Carcinoma**

LEARNING OBJECTIVES:

1. Knows how to identify the lesions
2. Knows how to classify the lesions
3. Understand the histopathology of each lesion
4. Recognize the treatment options of each lesion



Verruca
Upside down V



Condyloma
Sideways C



Papilloma
Pedunculated like P

Sara Gerion DDS MSc FRCD(C)

A mnemonic for remembering the microscopic and clinical shapes of verruciform oral lesions:

- **Verruca vulgaris** is shaped like a series of inverted V's.
- **Condyloma acuminata** are shaped like a series of C's placed on their sides.
- **Papillomas are** pedunculated like the letter P.

Squamous Papilloma

- **Most common (2.5% of all oral lesions)**
Associated with HPV (non-oncogenic types 2,6,11 &37)
- **On vermelion border of lip or any intraoral mucosal sites**



Hard & soft palate & uvula in (50% of lesions)

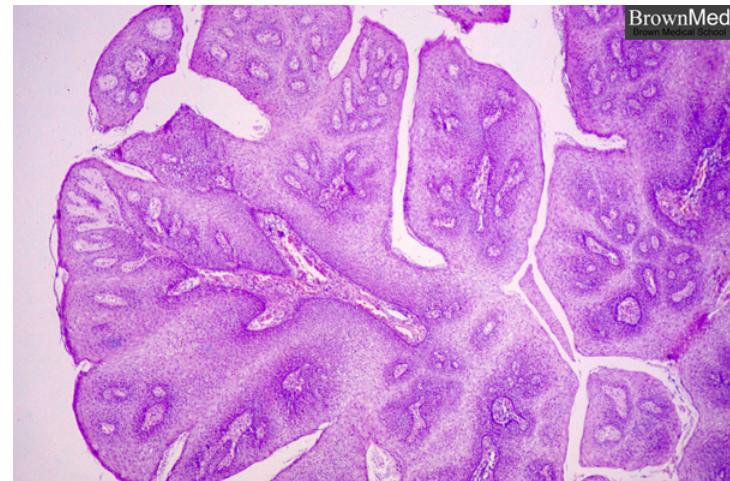
- **Less than 1 cm, pink-white exophytic granular or cauliflower- like surface alteration.**
- **Solitary, asymptomatic**
Oral warts increased in HIV/AIDS patients



Histopathology

Upper level of epith. Cells demonstrate **pyknotic nuclei**, surrounded by an edematous or clear zone forming the so called “ **Koilocytic** ” cells.

- Koilocytes are thought to be indicative of **virally altered state**



Differential Diagnosis

Verruciform xanthoma

Condylomata accuminatum

Treatment

Surgical excision or Laser ablation

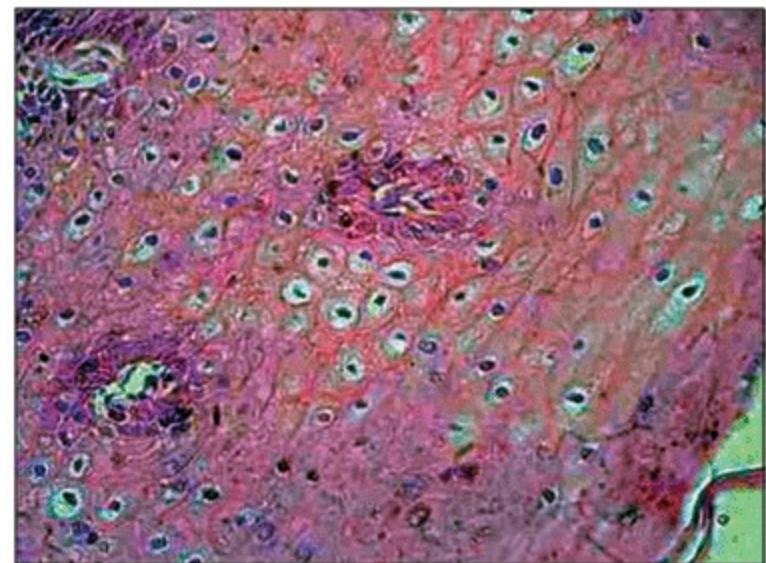


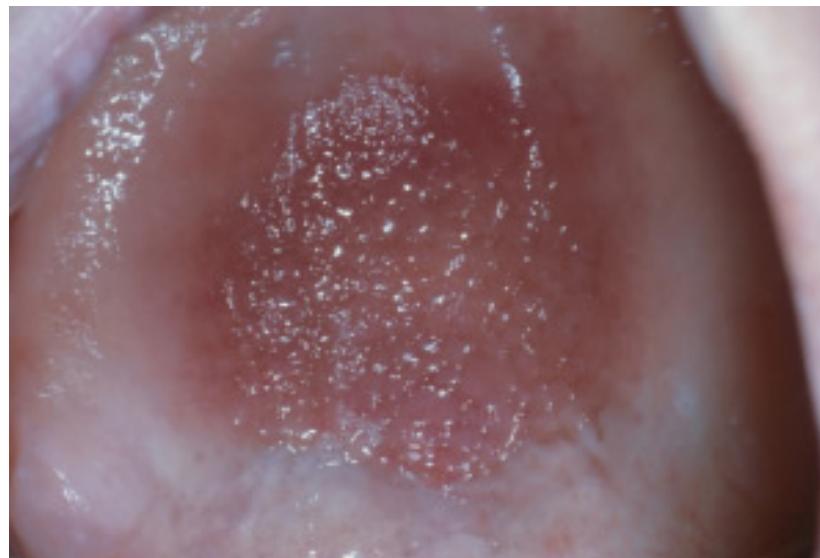
Figure 1. Hematoxylin-eosin stained slides showing koilocytosis: cells with picnotic halo, surrounded by clear outside halos with volume generally higher than that of the cytoplasm.

Papillary Hyperplasia “ Palatal Papillomatosis”

- ✓ Exclusive in **hard palate** , always associated with **removable prosthesis**.

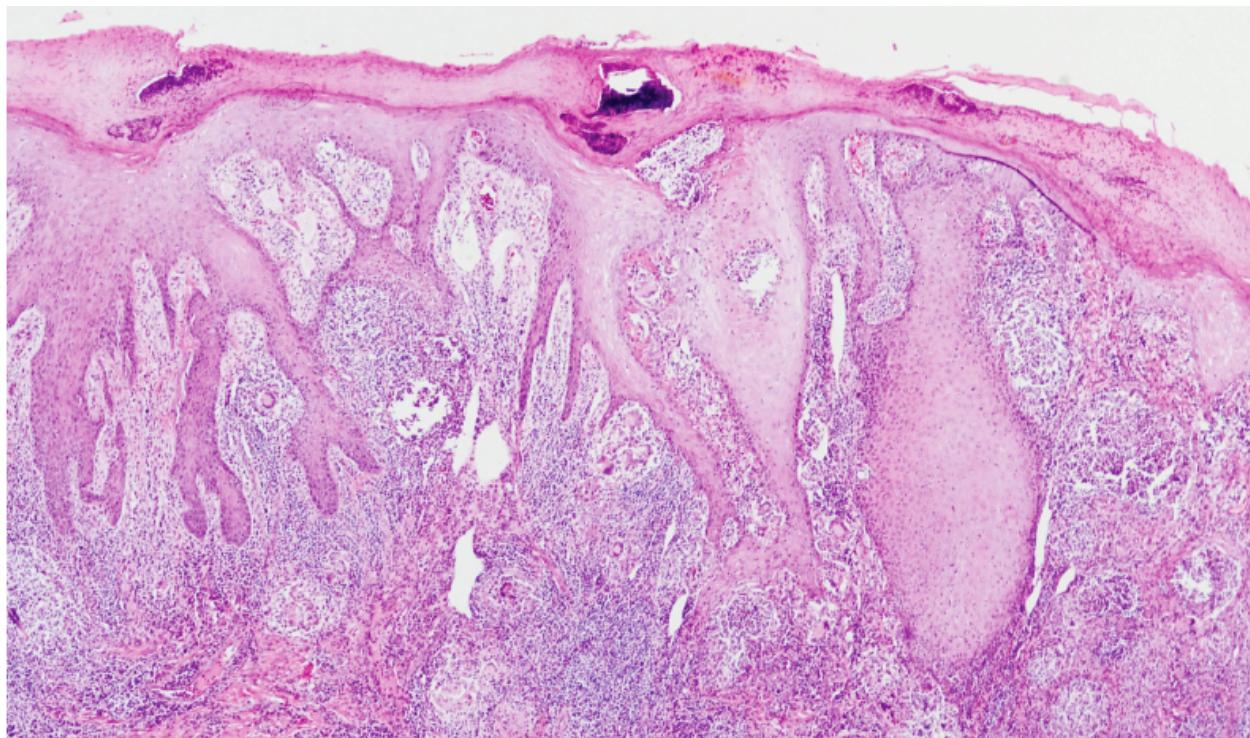
Due to **low grade chronic trauma with fungal infection under ill fitting dentures.**

- ✓ **Multiple erythematous & edematous papillary projections producing an overall verroucous granular or cobble-stone appearance**



Histopathology

- ✓ Small fronds or papillary projections covered by intact parakeratotic stratified squamous epith.
- ✓ The epith. is supported by hyperplastic central core of well vascularized CT stroma
- ✓ Pseudoepitheliomatous hyperplasia (mimic SCC) ,but with no evidence of dysplasia.



Differential Diagnosis

- ✓ Nicotina stomatitis
- ✓ Darrier's disease
- ✓ Squamous papilloma



Treatment

Surgical excision or cryosurgery, microablation or laser ablation



Condylomata Latum

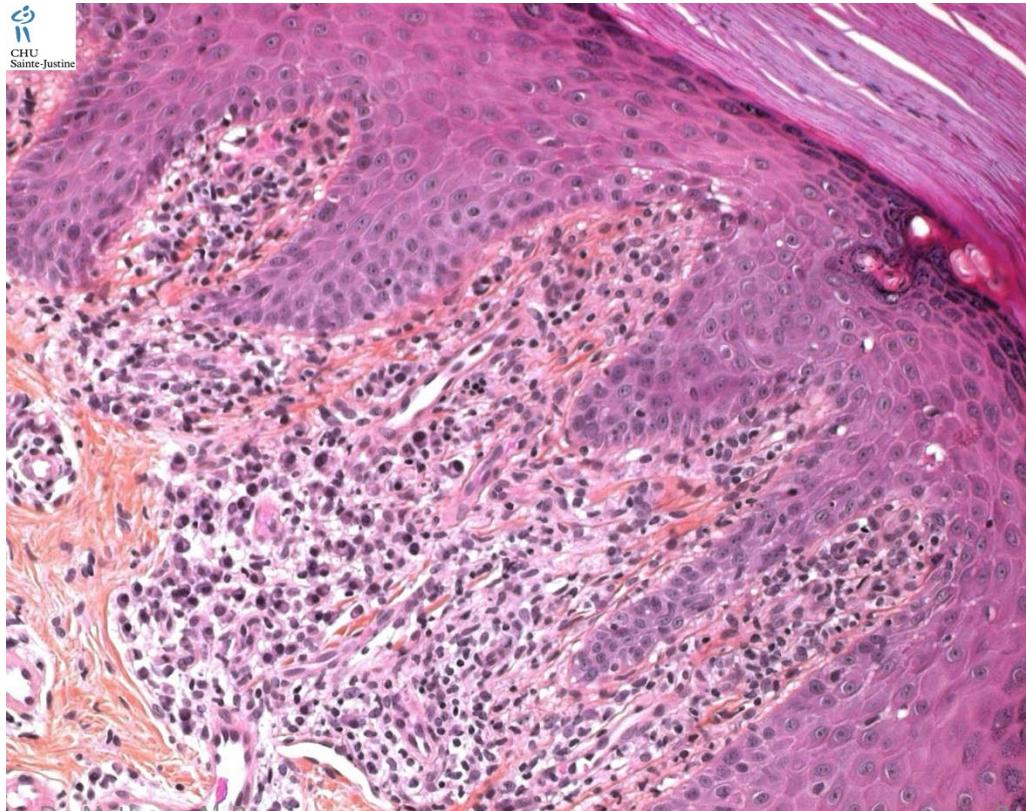
Expression of secondary syphilis

- **Exophytic, friable, papillary to polypoid lesions within oral cavity.**
- **Potentially infectious (abundant T pallidum)**
- **Perianal & genital area are the usual sites**



Histopathology

- **Acanthosis with inter and intracellular edema.**
- **Transmigration of neutrophils.**
- **Perivascular plasma cells infiltration in lamina properia**



Condylomata Accuminatum

Infectious lesion in **anogenital & oral regions.**

- Seen in HIV- infected patients (opportunistic)
- Caused by **HPV 6 & 11**



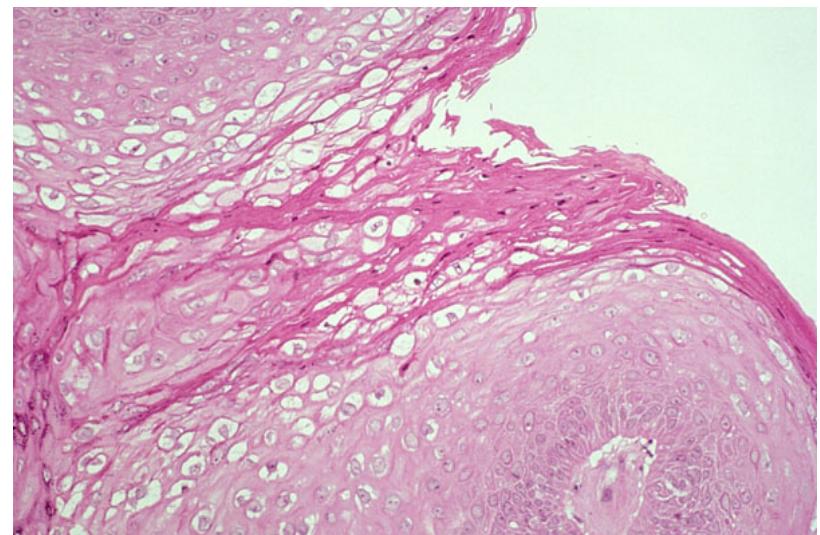
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- soft broad-base exophytic, papillary growth (keratinized or non-keratinized)

Histopathology

Parakeratotic stratified squamous epith., **acanthosis** & no dysplasia

- **Koilocytosis** in upper level of epith. Cells
- Trace of chronic infl. Cell in submucosa



Treatment

Surgical excision or laser ablation

Focal epithelial Hyperplasia (Heck's Disease)

- ✓ Due to low-grade irritation vitamin deficiency with HPV 13 & 32 infection.
- ✓ Numerous nodular soft tissue masses distributed over mucosal surfaces (buccal, labial mucosa, tongue & gingiva)
- ✓ Discrete or clustered papules with same color of surrounding oral mucosa.



Histopathology

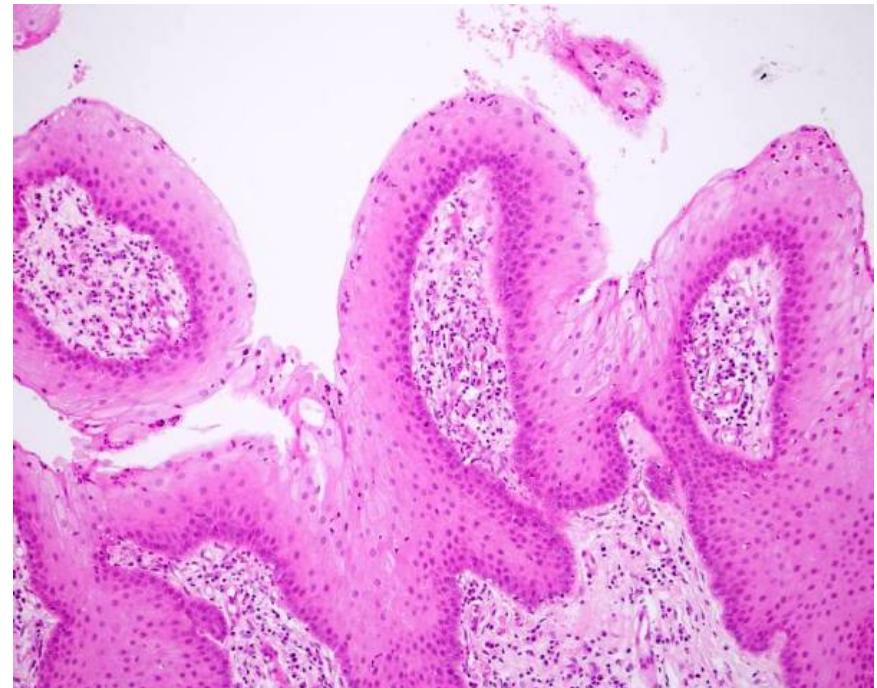
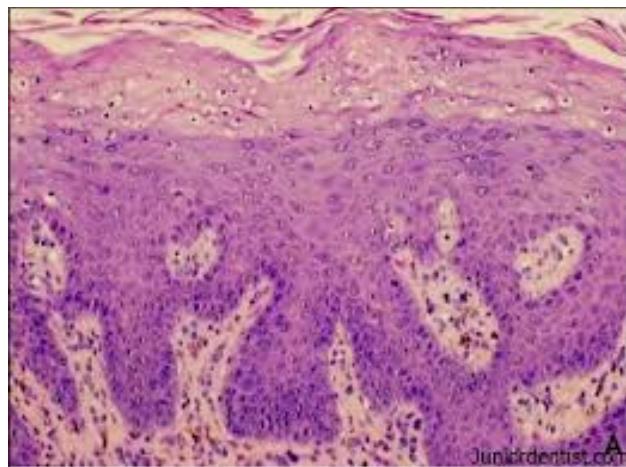
Acanthosis & parakeratosis

Prominent fusion of epithelial ridges.

Treatment

Non particular

Spontaneous regression may be seen



Pyostomatitis Vegetans

- Benign, chronic pustular form of mucocutaneous disease, mostly in association with inflammatory bowel diseases
- Unknown cause ,males at 6th decade.
- Involve gingiva hard & soft palate buccal & labial mucosae
- Buccal mucosa appear as erythematous, edematous, nodular & occasionally fissured.
Numerous tiny yellow pustules (2-3 mm) & small vegetating papillary projections may be seen over the surface of friable mucosa.



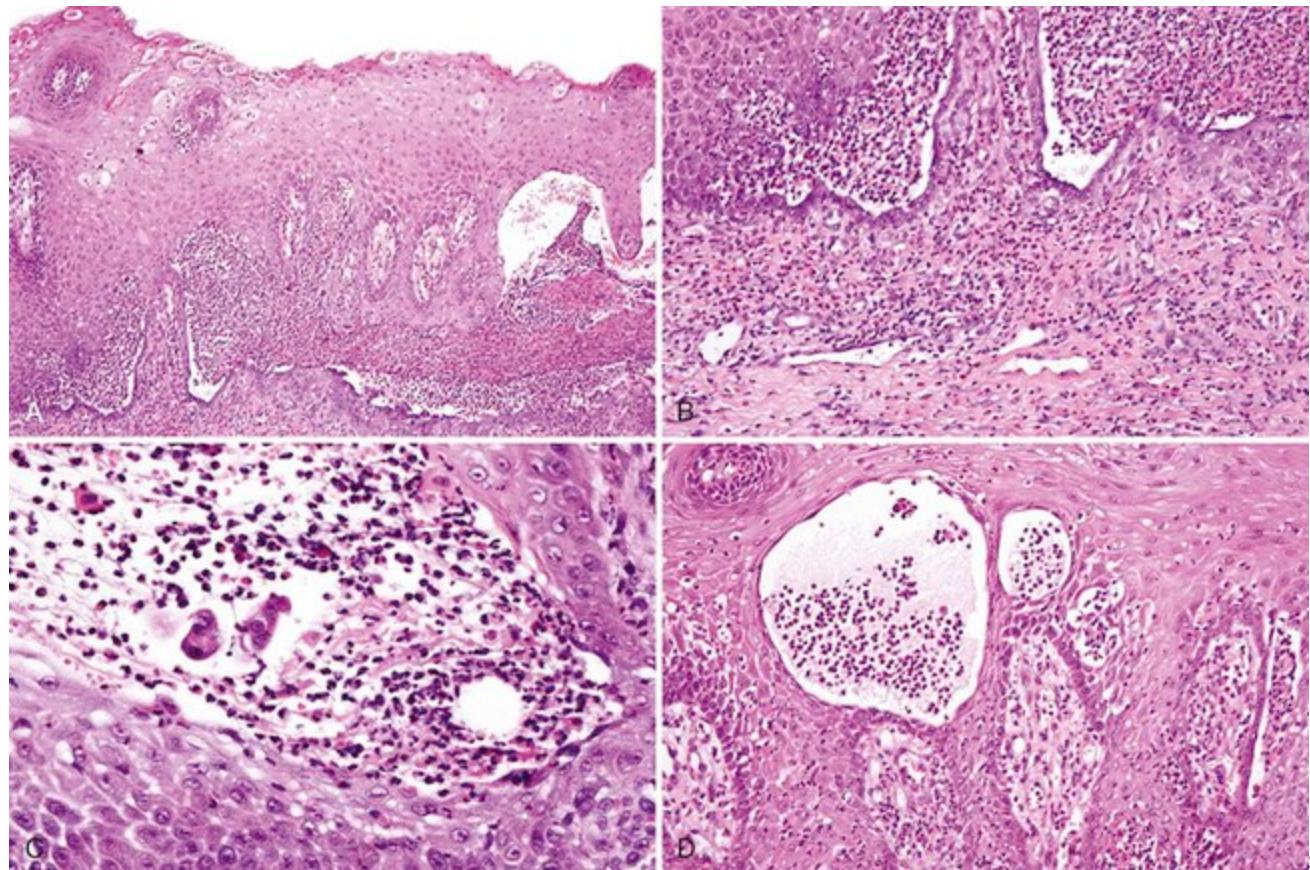
Histopathology

- Hyperkeratosis, acanthosis.
- Pseudoepitheliomatous hyperplasia
- PMNS & eosinophils infiltrate (consistent findings)
- Superficial abscess in lamina properia
- Ulceration may be seen

Treatment

Control of infl. Bowel diseases

Topical steroids, antibiotics, multivitamins & nutritional supplements.



Verruciform Xanthoma

- Uncommon, benign oral mucosal lesions , skin & genitalia
- Unknown cause, age of onset is 45 years
Well circumscribed lesion with granular to papillary surface.
- Size 2 mm to 2cm
- Color range from white to red.



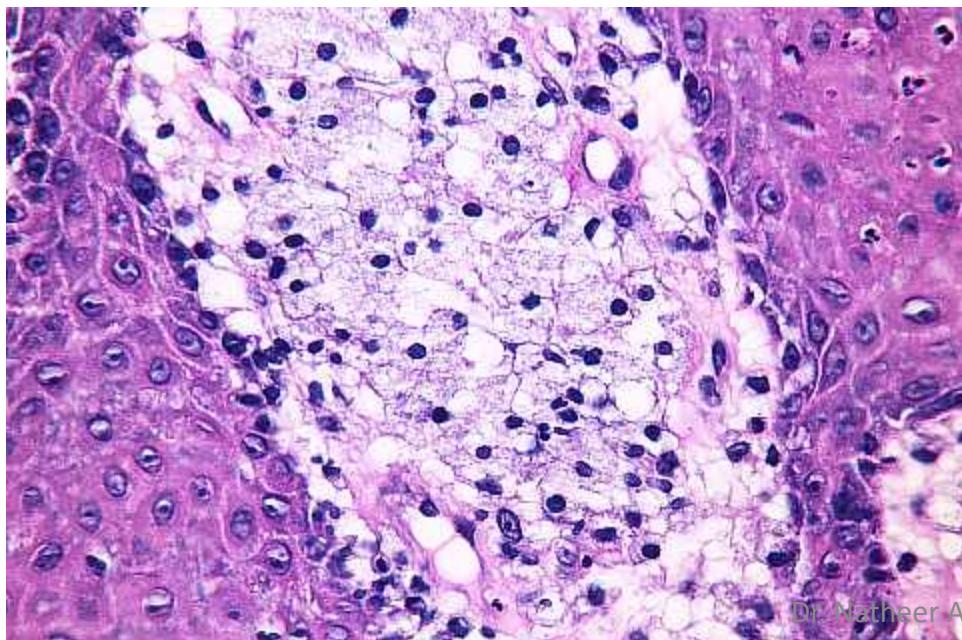
Histopathology

- Parakeratinized epith. Cells.
- Invigilated **crypts** alternate with papillary extension
- No evidence of dysplasia nor atypia.
- Numerous foam or **xanthoma cells** within lamina properia or CT papillae

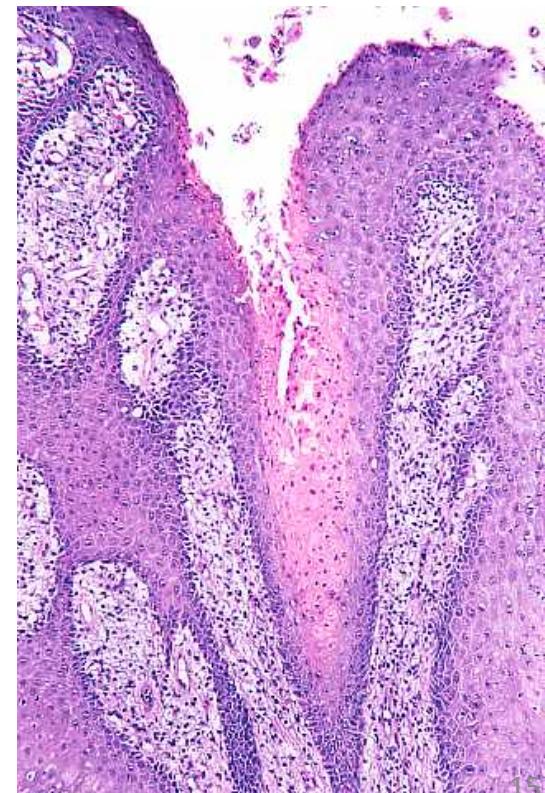


Treatment

Conservative, excision with no recurrence



Dr. Matheer Al-Rawi

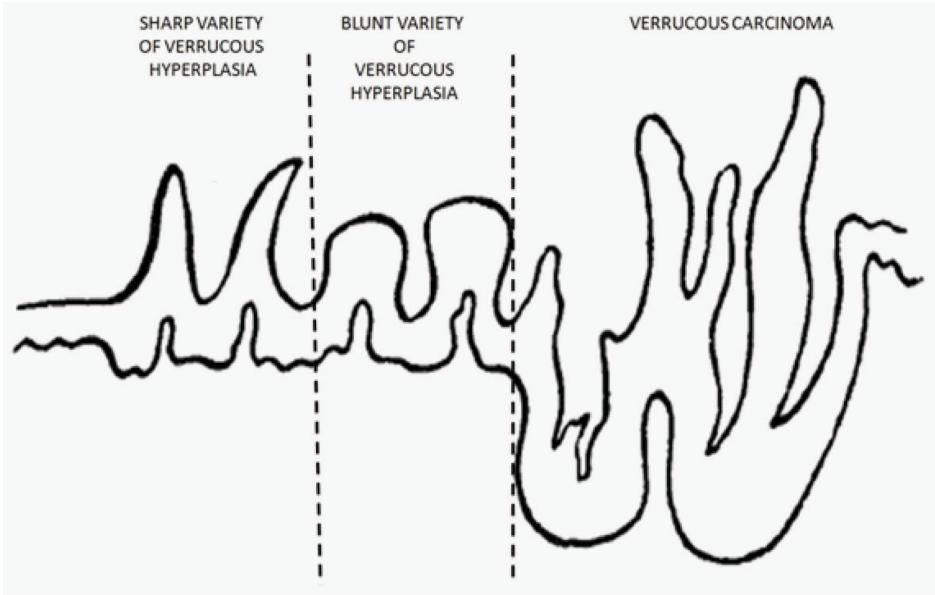


Verrucous Carcinoma

- Closely associated with the use of **tobacco** of various forms.
- **HPV** has a role.
- Account for 5 % of all intra oral SCC.
- **Site** buccal mucosa (most common), then gingiva (especially mandibular)
- Male over 50 years.

Early lesion As verrucous hyperplasia (white, indurated with irregular borders).

Late lesions: Exophytic with white-gray shaggy surface.



Histopathology

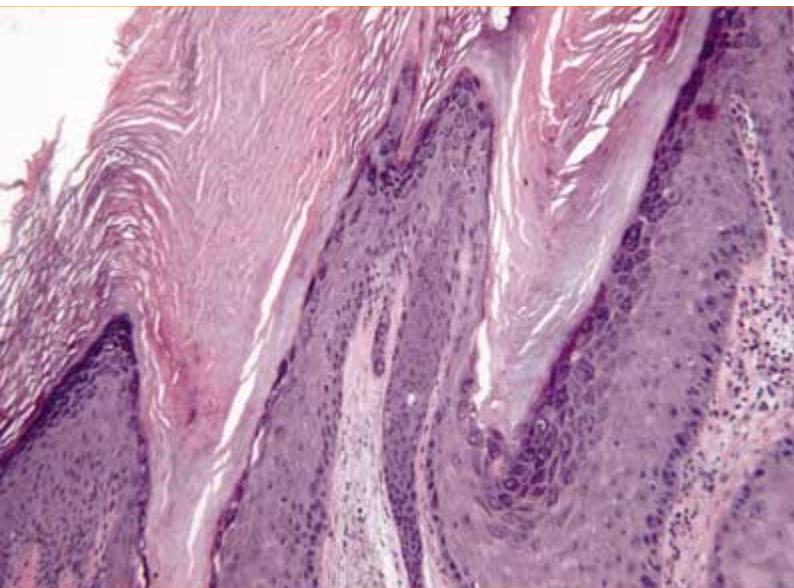
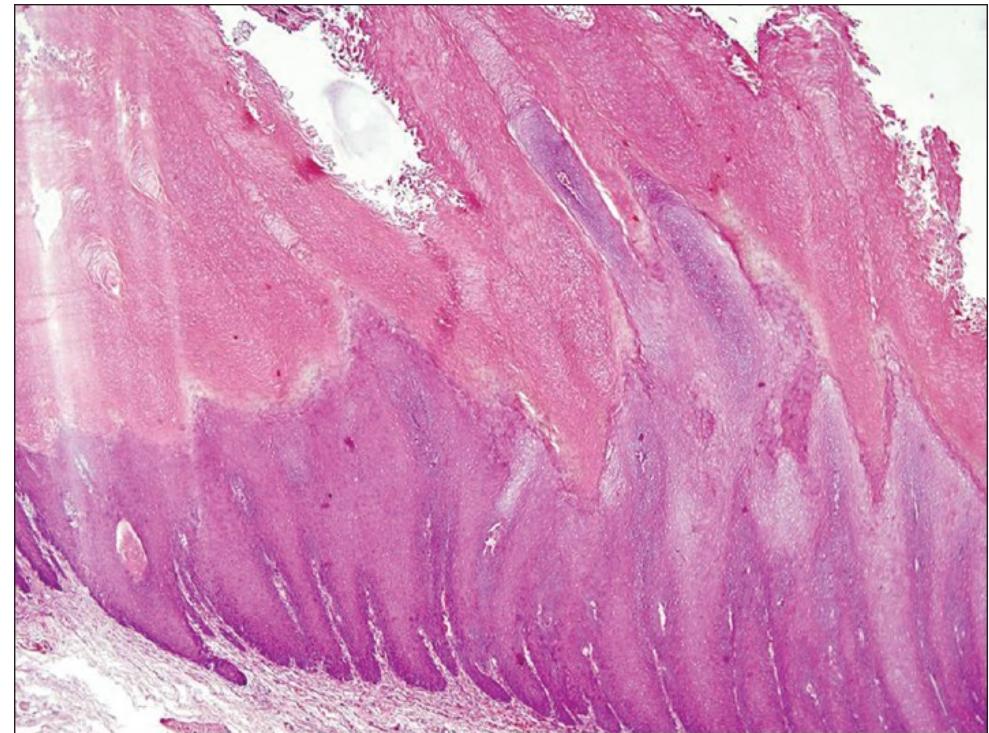
Papillary frond covered with markedly acanthotic, highly keratinized epith. Surface.

- Bulbous, well differentiated epith. Mass extend into the submucosa with blunt, pushing margins.
- Adjacent to the pushing margins of the carcinoma is a lymphocytic infiltrates.

Treatment

Surgical excision + radiotherapy

- Verrucous carcinoma rarely metastasize but is locally destructive.
- Excellent prognosis, because of high level of differentiation & no metastasis



Keratoacanthoma

- Squamo-proliferative lesion of unknown cause mainly in sun-exposed skin & sometimes at mucocutaneous junction, rare in oral mucous membrane.

On skin It originates within pilosebaceous apparatus

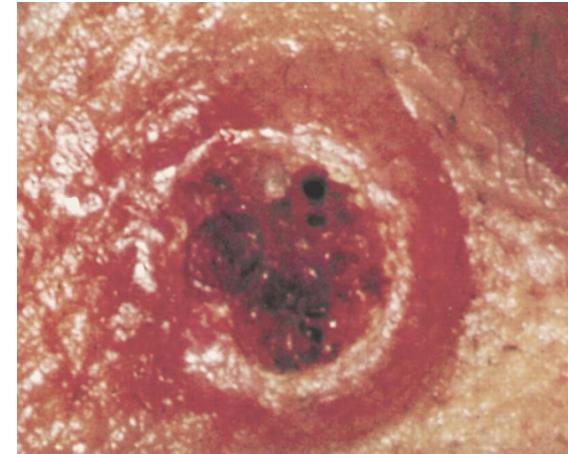
Orally Buccal mucosa > gingiva > tongue > palate

Solitary or multiple begins as small, red macule which soon become a firm papule with a fine scale over its highest point.

- ✓ **Fully developed lesion** contain a core of keratin surrounded by a concentric collar of raised skin or mucosa.
- ✓ If lesions not removed, **spontaneous regression occur.**

The central keratin mass is exfoliated, leaving a **cup-shaped** lesion which heals with superficial scar formation

Dr. Natheer Al-Rawi



Histopathology

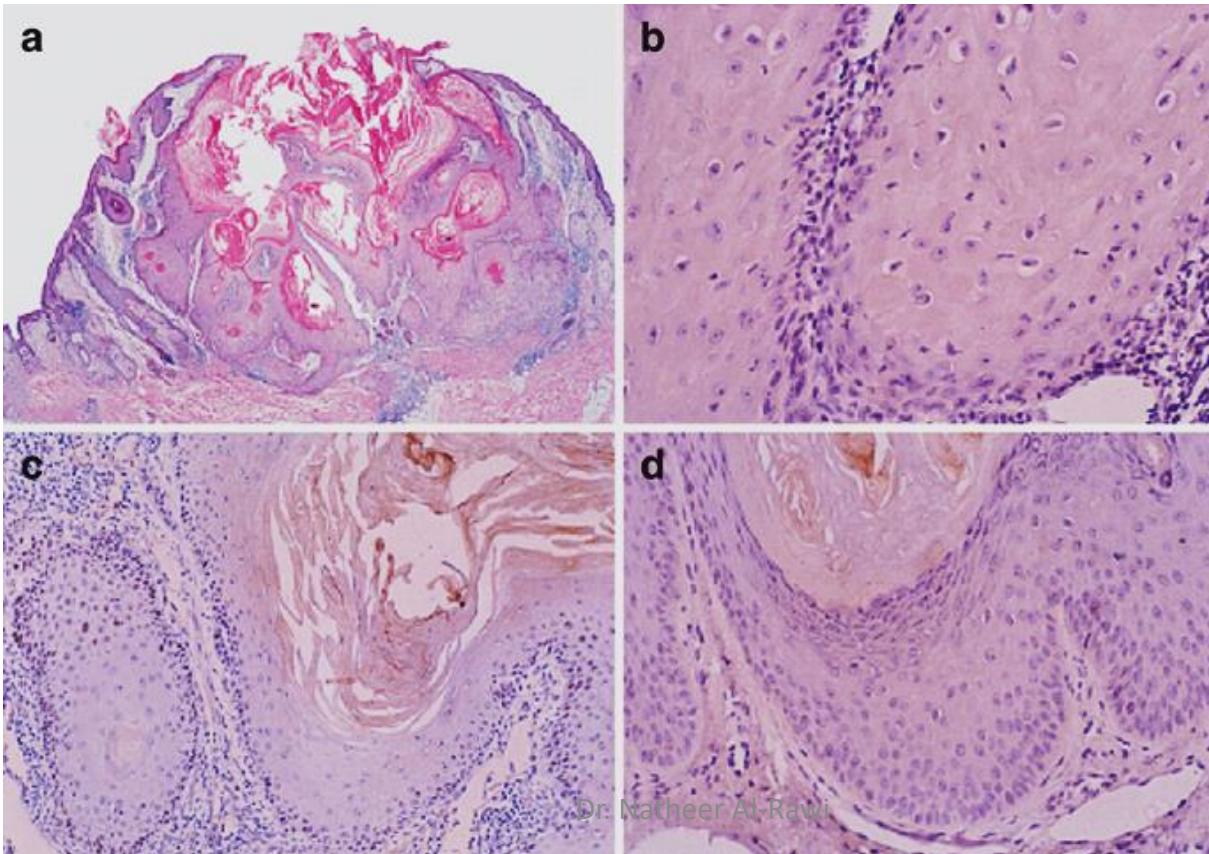
- **Central keratin plug with overhanging lip of epith.**
- **Pseudoepitheliomatous hyperplasia** with intense mixed infl. Infiltrate
- **Mimic SCC**

Differential Diagnosis (skin lesions)

- **Molluscum contagiosum**
- **Solar keratosis**
- **Verruca vulgaris**

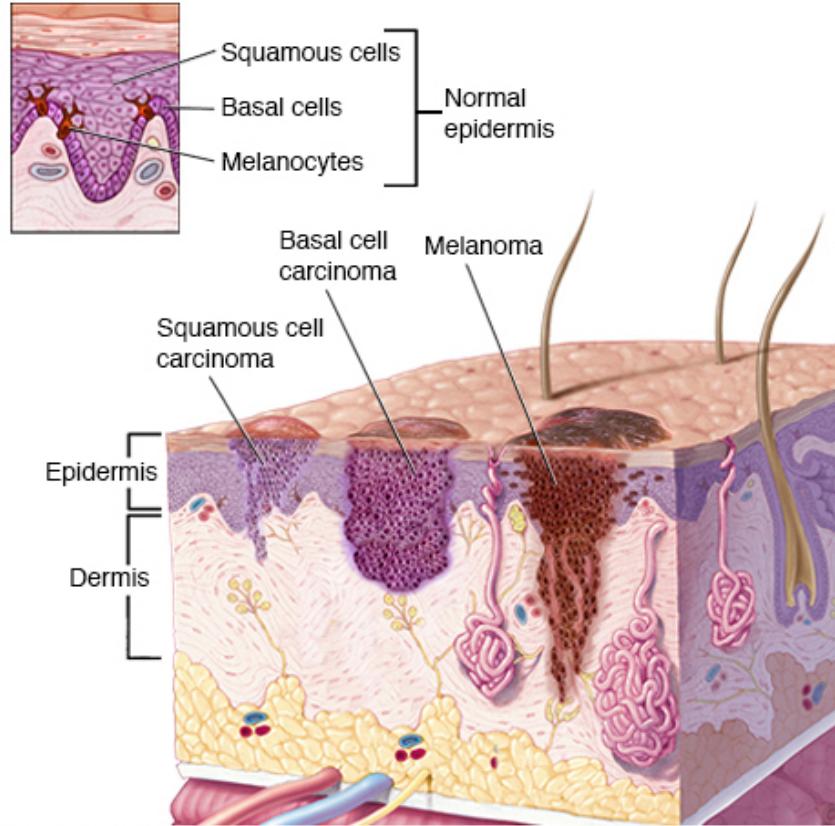
Treatment

Surgical excision with careful follow up (excellent prognosis)



Basal Cell Carcinoma:

- Incidence US 500-1000 per 100,000
- >400,000 new patients annually
- Age usually over age 40
- Sex Males >Females
- Race rare in brown and black skinned pt



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Types:

- Superficial BCC
- Nodular BCC
- Pigmented BCC
- Cystic BCC
- Sclerosing or Morpheaform BCC
- Recurrent BCC



Credit: Romanian Skin Cancer Foundation
Dr. Natneer Al-Rawi

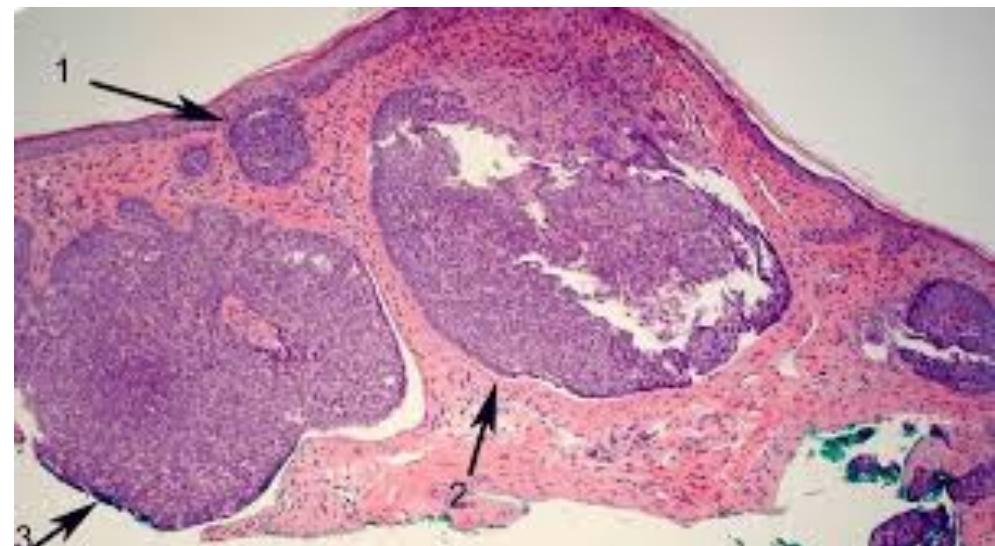
Histopathology:

- Nests or lobules of hyperchromatic but uniform basaloid cells with peripheral palisading, surrounded by loose stroma, often with myofibroblasts and mucinous changes

Also cleft-like retraction spaces (due to stromal mucin)

May appear pigmented due to dermal melanophages

Variable Langerhans cells
Occasional amyloid





Squamous Cell Carcinoma

- Arises from superficial layers of **keratinocytes**
- **Actinic keratosis** is precursor
- Non-healing lesion that may **bleed** without trauma
- Location: **Sun-exposed** areas



Actinic Keratosis

- Also known as solar keratosis
- Atypical epidermal keratinocytes
- Precancerous for squamous cell



Melanoma

- Asymmetry
- Boarder irregularity
- Color variations
- Diameter > 6 mm



Basal cell carcinoma

- Most common skin cancer (USA)
- Pearly nodule
- "Rolled" raised edge
- Telangiectatic vessels

Malignant Melanoma

- Peak incidence between 40-60 years.
- Usually appear as black or brown patches
- UV exposure, fair complexion & sun sensitivity (well recognized etiological factors for coetaneous melanoma).
- Mucosal melanoma are common in India, Japan & Africa.
- Amelanotic melanoma appear red.



Malignant Melanoma

- IO site: Palate & upper alveolar ridge.
- Oral Melanoma is flat or raised nodular lesion which later cause soreness & bleeding.
- It grows in predictable manner:
 - ✓ Radial or horizontal growth phase (pre invasive or in situ stage)
 - ✓ Vertical growth phase (Invasive stage)



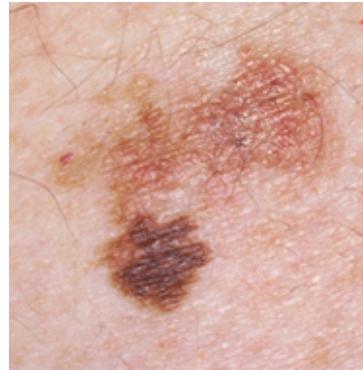
Malignant Melanoma

- 30% of melanomas preceded by an area of hyperpigmentation, often by many years----- dysplasia of melanocytes or melanoma in radial growth phase.



Clinicopathological types of melanoma

1. **Superficial spreading melanoma** (R growth phase), most common cutaneous melanoma.
2. **Nodular melanoma** (V growth phase), 1/3 develop in head & neck region
3. **Lentigo maligna melanoma** (R growth phase), develop from precursors Hutchinson's freckles in sun exposed, fair complexioned skin in mid facial area.
4. **Acral Lentiginous melanoma** (R growth phase) most common in blacks, most common form of oral melanoma, darkly pigmented, irregular margin nodule.



Malignant Melanoma

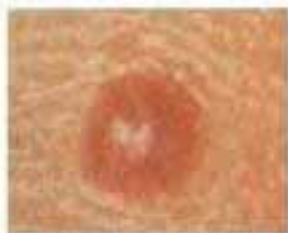
- Because of many clinical similarities between malignant melanoma and benign counterpart (Melanocytic Nevus) “ **ABCDE**” system of evaluation has developed;
 - **Asymmetry** (because of uncontrolled growth pattern)
 - **Border irregularity** (often with notching).
 - **Color variation** (from brown-black, white, red & blue)
 - **Diameter** (greater than 6 mm)
 - **Evolving** (lesion changes overtime)

Normal Mole	Melanoma	Sign	Characteristic
		Asymmetry	when half of the mole does not match the other half
		Border	when the border (edges) of the mole are ragged or irregular
		Color	when the color of the mole varies throughout
		Diameter	If the mole's diameter is larger than a pencil's eraser

Photographs Used By Permission: National Cancer Institute

The ABCDEs of Detecting Melanoma

NORMAL



Symmetrical



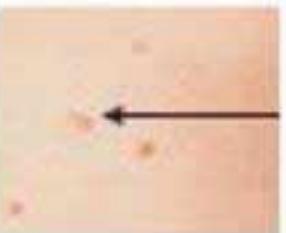
Borders Are Even



One Color



Smaller Than
1/4 Inch



Ordinary Mole

MELANOMA



Asymmetrical



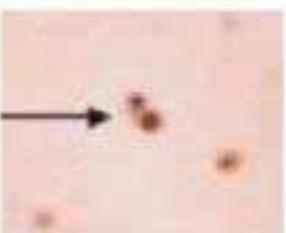
Borders Are Uneven



Multiple Colors



Larger Than 1/4
Inch



Changing in
Size, Shape and
Color

Image Credit: <http://bioskincares.com>

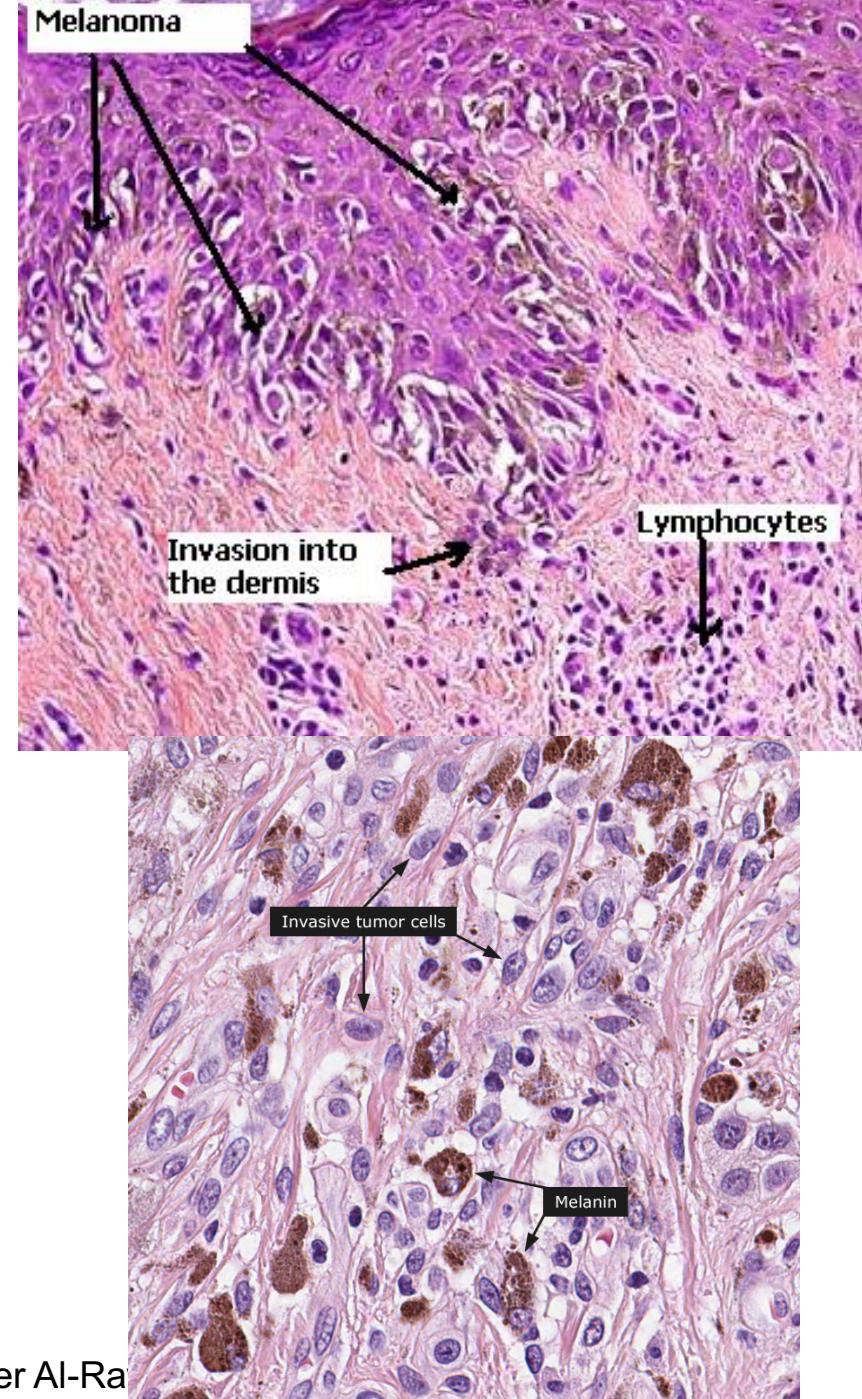
Malignant Melanoma

Histopathology:

- ✓ Neoplastic melanocytes surrounded by **clear halos** within the epithelium and invading the deeper tissue.
- ✓ Neoplastic melanocytes are round to spindle-shaped and typically speckled or intensely pigmented with melanin.

Prognosis:

Lesion should be excised , but median survival probably not longer than 2 years.



That's all
Thank You

