Benign versus Cancerous Lesions
How to tell the difference – FMF 2014

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Benign lesions

Seborrheic Keratoses:

- Warty, stuck-on
- Genetics and birthdays
- Can start in late 20s…never stop☺
- Many different presentations but all benign (ABCDEs don't apply)
- Treatment not covered.
- Dermoscopy: comedo-like openings, milia-like cysts, fissures, reg. hairpin vessels, fat fingers

Dermatofibroma:

- Benign fibrous skin lesion
- Firm, pink or brown
- Dimple to palpation
- Often arises at site of minor injury that has been manipulated/ shaved over
- Dermoscopy: central depigmented scar with surrounding peripheral network

Intraepidermal nevus:

- Dome shaped nevi, often on the face
- Patients may have several of these

- Can be confused with BCC, but firm, not friable, and under dermatoscope more comma-like/peripheral vessels (not arborizing)

Sebaceous Hyperplasia:

- benign enlargement of the sebaceous lobule around a follicular opening
- present as one or multiple yellowish to skin coloured papules, often with a central dell
- they are seen most often on the nose, cheeks and forehead in middle aged to older individuals
- Under dermoscopy yellowish/white lobules around a central hair follicle with peripheral vessels

Actinic Keratoses:

- Skin coloured, pink or brown
- Rough, sandpaper like crust (don't just look, feel)
- Sun exposed sites, fair-skinned older patients
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Clinical variants

- atrophic
- pigmented
- hyperkeratotic
- cutaneous horn
- confluent
- actinic cheilitis

- the initial lesion in the disease continuum that progresses to SCC
- controversy as to whether these should be regarded as SCC in situ
- 60% of SCC arise within an AK and 97% of SCCs have a contiguous AK

- range for risk of transformation in the literature is <1 % to 20% per year and lifetime risk for SCC in patients with multiple Aks is substantially increased
- strong predictor of future non-melanoma skin cancer development

Basal Cell Carcinoma:

- Affect those with fair complexions and hx of excess sun exposure
- Grow slowly over months or years
- Range from a few mm to sev centimetres
- May ulcerate recurrently
- Patients are usually over 40
- Dermoscopy- arborizing vessels, translucent, ulceration, rolled edge

4 types:

- Nodular BCC – most common
  - sun exposed, head & neck mainly
- Pigmented BCC
  - pearly and pigmented, nodular or superficial
- Superficial BCC
  - usually found on trunk, patch resembles eczema
- Sclerosing (morpheaform) BCC
  - difficult to see borders; most aggressive type, may present with a scar-like appearance

Squamous cell carcinoma:

- Clinical manifestations
- firm, flesh-coloured or erythematous keratotic papule or nodule

- may present as ulcer, cutaneous horn, smooth nodule or verrucous nodule/plaque
- tendency to cause local tissue destruction
- metastases to regional lymph nodes occurs in 0.5 to 6 % of cases (lip has highest rate at 13.7%)
- Affects fair skinned patients with excess sun exposure, immunosuppressed pts, may arise in burns, scars, from HPV
- No consistent dermascopic pattern
- May arise from or be adjacent to actinic keratosis

High Risk SCC (for recurrence and metastases)

- > 2 cm diameter or depth greater than 4 mm
- tumour involving bone, muscle, nerve
- location on lip or ear
- tumour arising in scar
- patient immunosuppression
- all SCC patients should be considered at risk for additional SCC or BCC and followed q 3 – 12 months

Melanocytic nevi:

- Proliferation of melanocytes
- Some are present at birth, but more often arise during childhood to early adulthood
- The average person has 20-50 nevi

Junctional nevus:

- appears btw ages 5-30 and gradually increase in size as child grows and during pregnancy. Macular. 1-5mm. Light to dark brown, evenly coloured, symmetrical and well demarcated.

Compound nevus:

- appears btw ages 5-35 and gradually increase in size as child grows and during pregnancy. Papules with various degrees of elevation. 5-10mm. Light to dark brown, evenly coloured, symmetrical and well demarcated.

Intradermal nevus:

- appears after age 20 and usually don't change in size. Papules, 2-10mm. Brown, speckled, pink or skin coloured, symmetrical and well demarcated.

Halo Nevus:

- Sometimes triggered by sunburn
- Common in children and young adults
- If the nevus is atypical then may be a feature of melanoma

Spitz Nevus:

- Usually seen in children, but sometimes in adults
- Appear suddenly, grow rapidly
- Clinically and histologically similar to melanoma so generally wide excision recommended

Actinic Keratoses:

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- Sun exposed sites, fair-skinned older patients
- Clinical variants

    - atrophic
    - pigmented
    - hyperkeratotic
    - cutaneous horn
    - confluent
    - actinic cheilitis
- the initial lesion in the disease continuum that progresses to SCC
- controversy as to whether these should be regarded as SCC in situ
- 60% of SCC arise within an AK and 97% of SCCs have a contiguous AK
- range for risk of transformation in the literature is 10% over 10 years and lifetime risk for SCC in patients with multiple Aks is substantially increased
- strong predictor of future non-melanoma skin cancer development

Melanoma:

- May be nodular or flat
- ABCDE (asymmetry, borders, colour, diameter, evolution) are characteristics for diagnosis
- Consider using the "ugly duckling" sign yourself and teaching it to your patients for self-skin examination
- May arise de novo, or within an existing pigmented lesion
- Most common site in women is the legs, in men it is the back
- Melanoma can present on NON sun exposed sites as well

The 4 major types of melanoma:

- **Superficial spreading melanoma:**
  -70% of melanomas; usually flat but may become irregular and elevated in later stages
  -average 2 cm in diameter, with variegated colors, as well as peripheral notches, indentations, or both

- **Nodular melanoma:**
  -15-30% of melanoma
  -typically blue-black but may lack pigment in some circumstances (amelanotic melanoma)

- **Lentigo maligna melanoma:**
  - 4-10% of melanomas
  - often larger than 3 cm, flat, variable pigmentation, with marked notching of the borders; they begin as lentigos
  - Generally on the head and neck of older patients

- **Acral lentiginous melanoma:**
  - 2-8% of melanomas in caucasions and 35-60% of melanomas in skin of colour
  - on the palms and soles as flat, tan, or brown stains with irregular borders; subungual lesions can be brown or black, with ulcerations in later stages

Staging:

- **Stage** **Characteristics**
- Stage 0 In situ melanoma
- Stage 1 Thin melanoma <2 mm in thickness
- Stage 2 Thick melanoma > 2 mm in thickness
- Stage 3 Melanoma spread to involve local lymph nodes

Stage 4 Distant metastases have been detected

Surgery:

- Melanoma in situ: WLE with 5mm margins
- Melanoma <2mm: WLE with 1cm margins
- Melanoma >2mm: WLE with 2cm margins
- Generally sentinal lymph node biopsy (SLNB) is recommended for lesions >1mm in thickness