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

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 several 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 between 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

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- 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 Caucasians and 35-60% of melanomas in skin of color
  - 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 sentinel lymph node biopsy (SLNB) is recommended for lesions > 1mm in thickness