CURRENT GUIDELINES FOR SCREENING AND DETECTING SKIN CANCERS IN PRIMARY CARE SETTINGS:
AN EVIDENCE-BASED APPROACH

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WHY IS IT IMPORTANT?

"Skin Cancer is the most common cancer in the United States" (AAD).

LEARNING OBJECTIVES

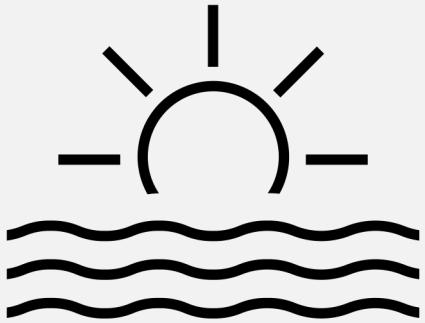
At the conclusion of this session, participants should be able to:

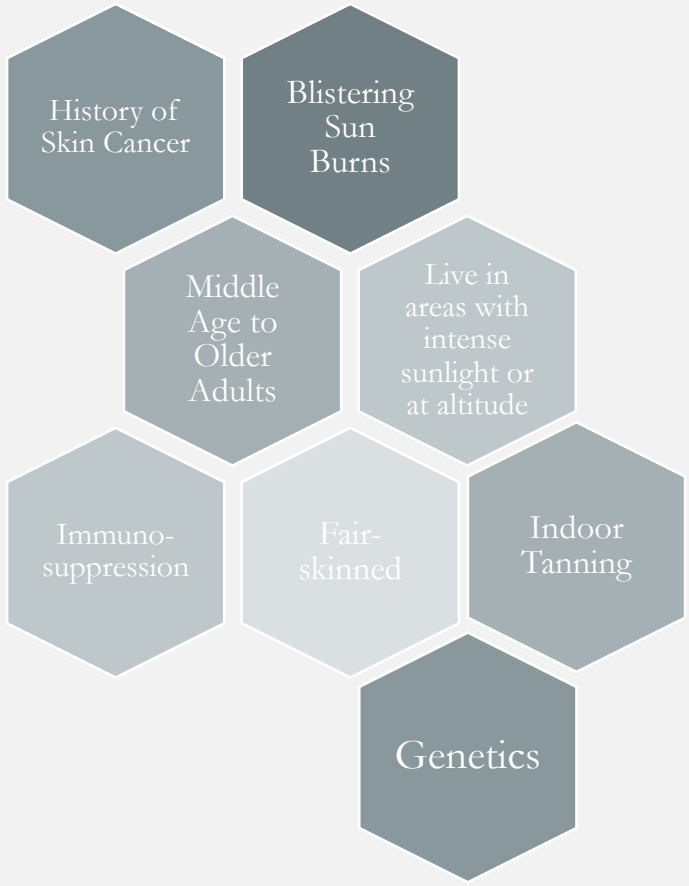
- Apply evidence-based practice guidelines to distinguish the key features associated with the 3 most prevalent skin cancers (basal cell carcinoma, squamous cell carcinoma, melanoma)
- Provide timely and age-appropriate recommendations to patients pertaining to treatment and referrals

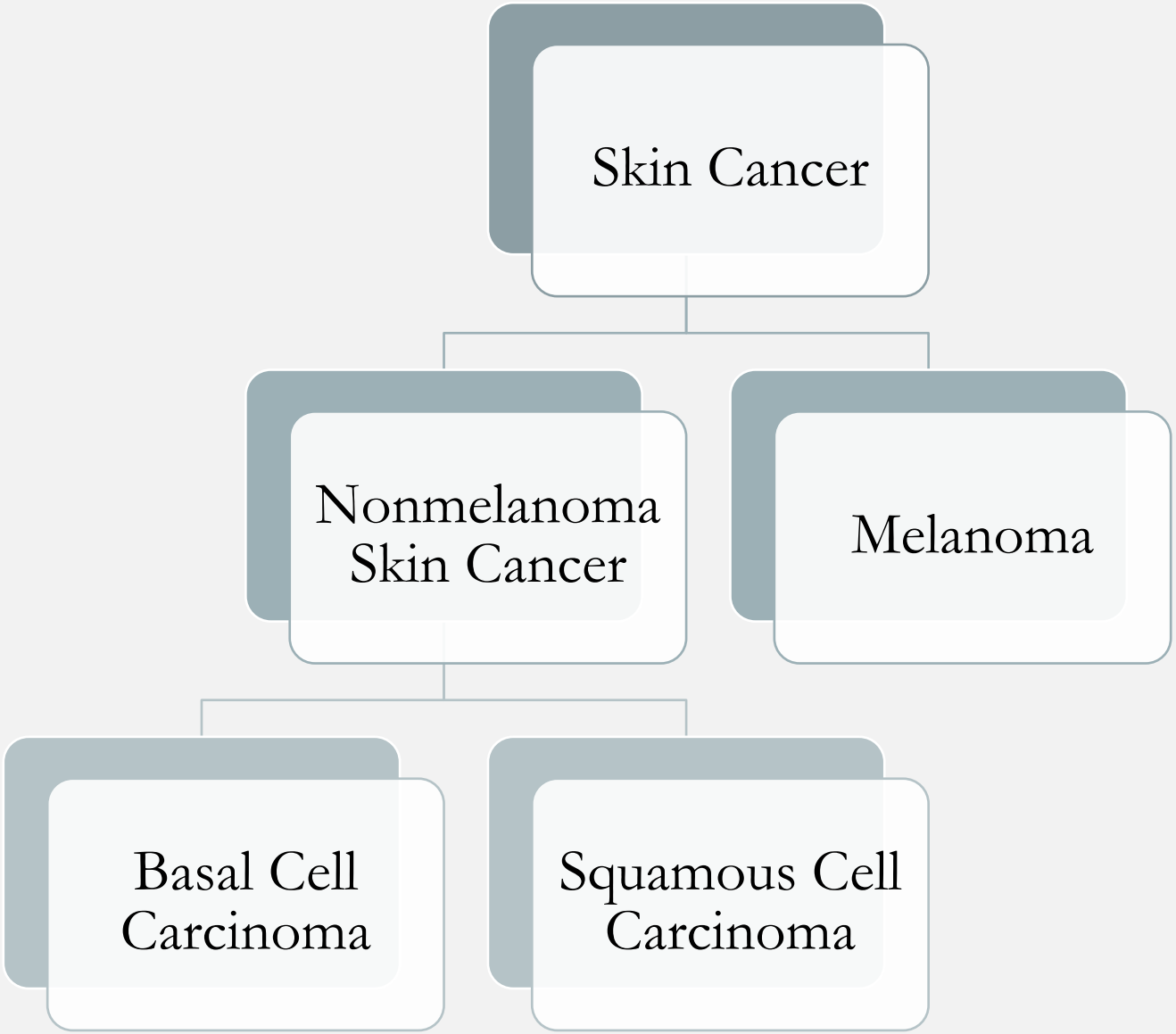
SKIN CANCER PREVENTION

- **Patient education is key**
- Seek shade, UV index is highest from 10 am to 2 pm
- Utilize sun protective clothing
- Avoid tanning beds, consider self tanning products
- Broad spectrum sunscreen, SPF 30 or higher
- Encourage regular self skin exams
- Reapply sunscreen every 2 hours or after swimming or sweating
- Caution around snow, sand and water

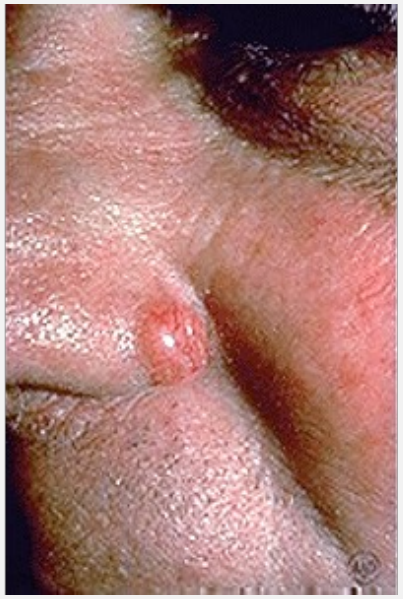
WHO IS AT RISK?

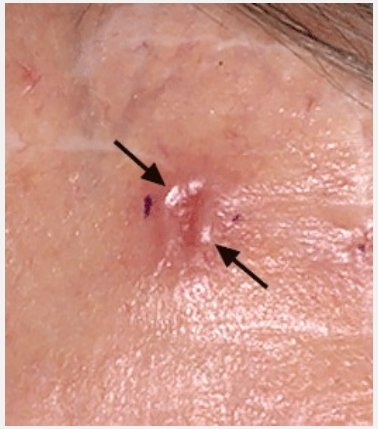


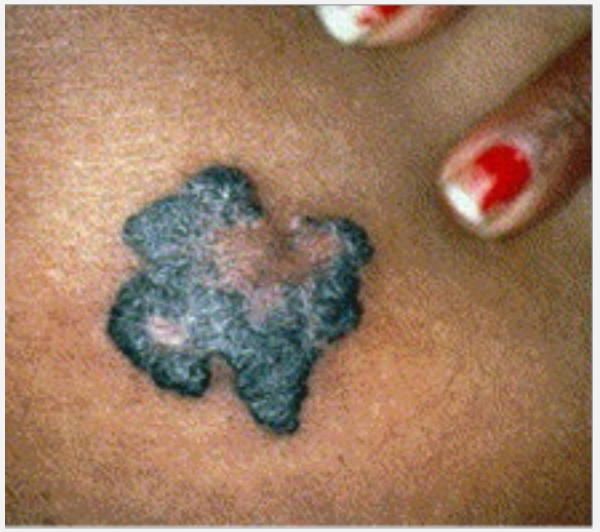


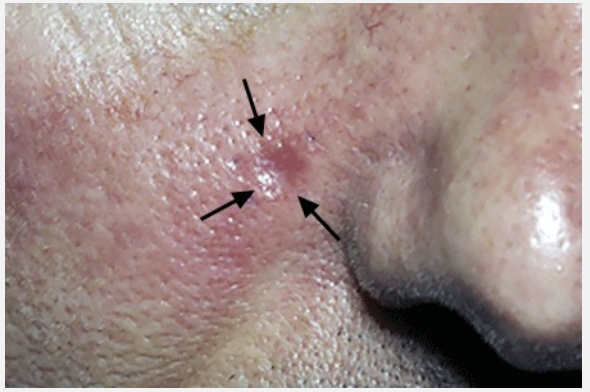

Skin Cancer
Nonmelanoma Skin Cancer
Melanoma
Basal Cell Carcinoma
Squamous Cell Carcinoma

BASAL CELL CARCINOMA







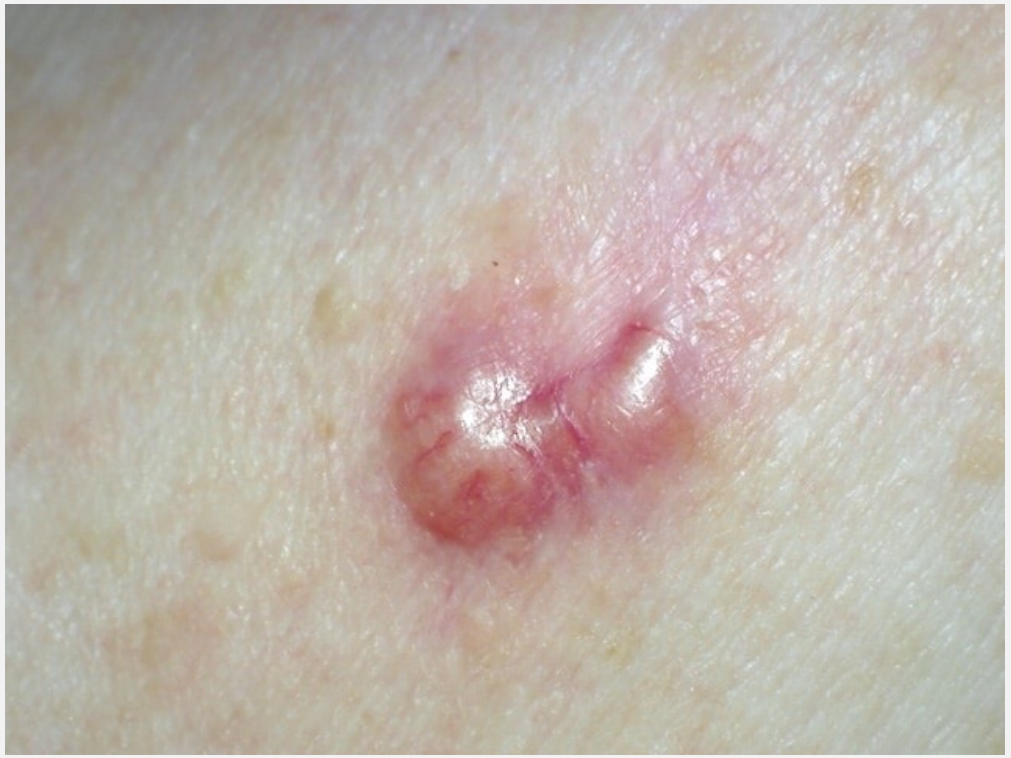


CLINICAL PRESENTATION

Where is it found on the body?

- **Sun exposed areas** – head, neck, back
- Rarely seen on dorsum of hands or on lower extremities
- BCC can occur in areas where there is no to little history of sun exposure (20% of cases)
  - Example: behind the ears, areas of chronic trauma or chemical exposure.

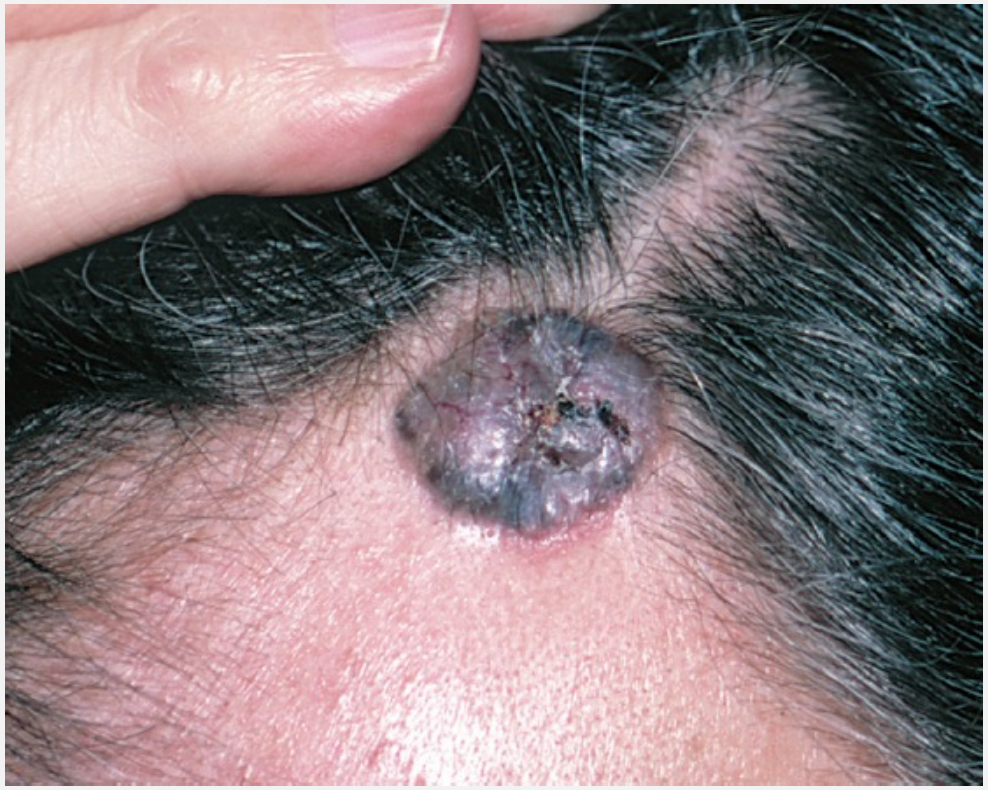
CLINICAL PRESENTATION



Nodulocystic BCC

- Round growth
- Color: red, pink, flesh colored
- Pearly, translucent appearance
- Over time the center can ulcerate
- Rolled edges
- Telangiectasias within the border
- Friable, non-healing
- Appears as a sore, pimple or wound

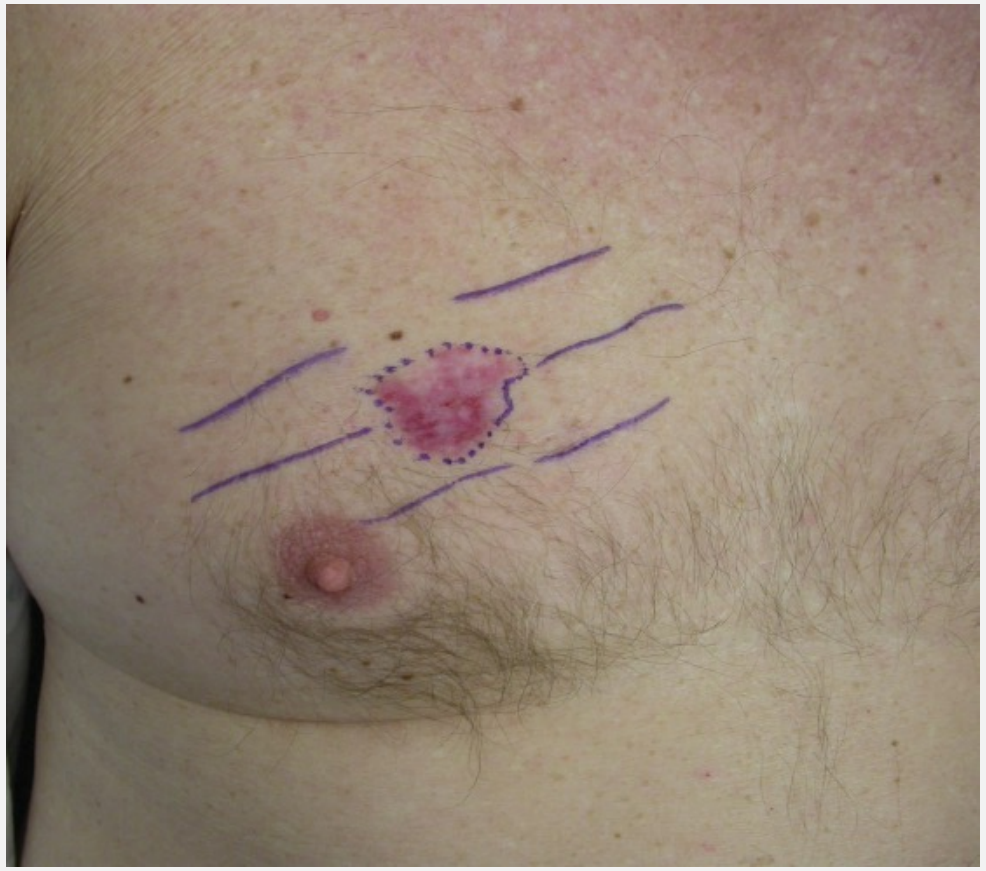
CLINICAL PRESENTATION



Pigmented BCC

- Mottled, blue or brown color
- Can be misdiagnosed as a Seborrheic Keratosis or Melanoma

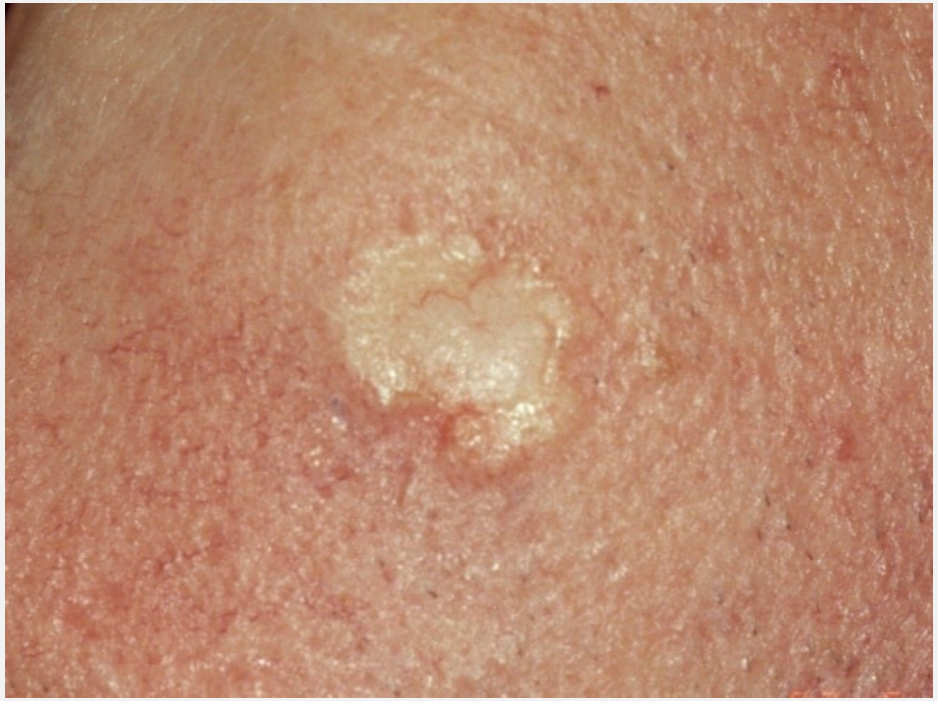
CLINICAL PRESENTATION



Superficial BCC

- Pink to Red Color
- Well-defined macules or plaques
- Scaly, Rough
- Seen more on the trunk and extremities
- Can be sensitive or bleed easily
- Can have delayed diagnosis due to resembling eczema, psoriasis and other common skin findings

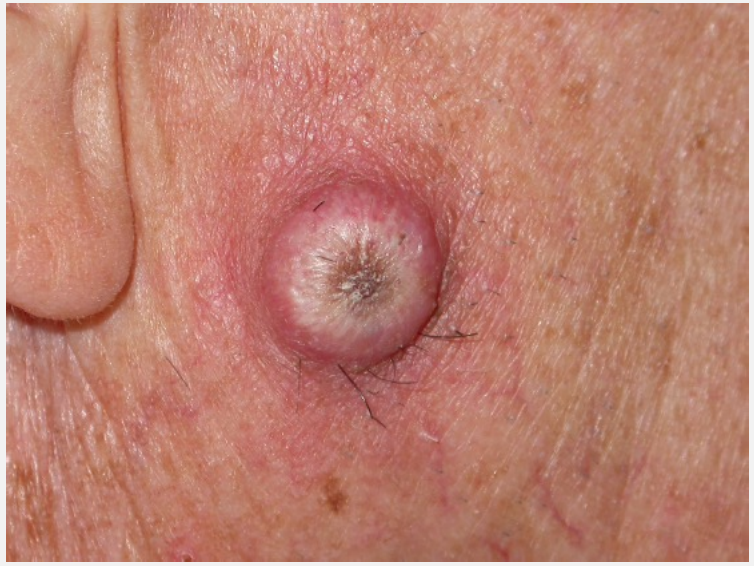
CLINICAL PRESENTATION

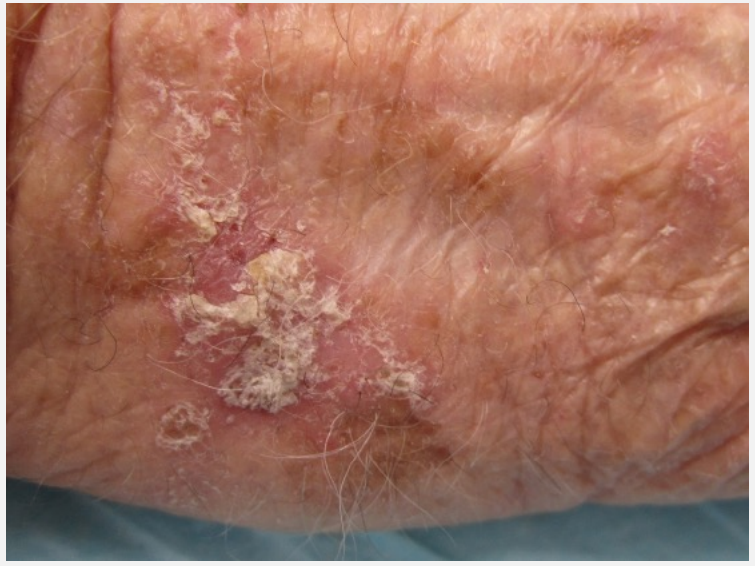


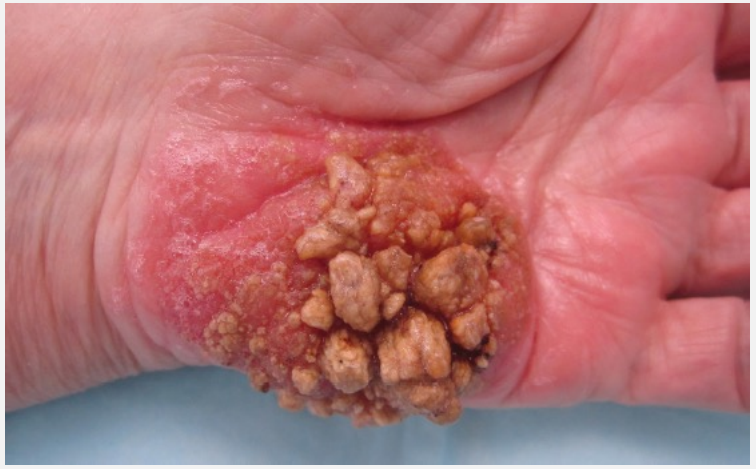
Morpheaform BCC

- Only comprise 1% of BCCs
- Sclerotic plaques
- Atrophic, waxy white surface
- Resembles a scar

SQUAMOUS CELL CARCINOMA





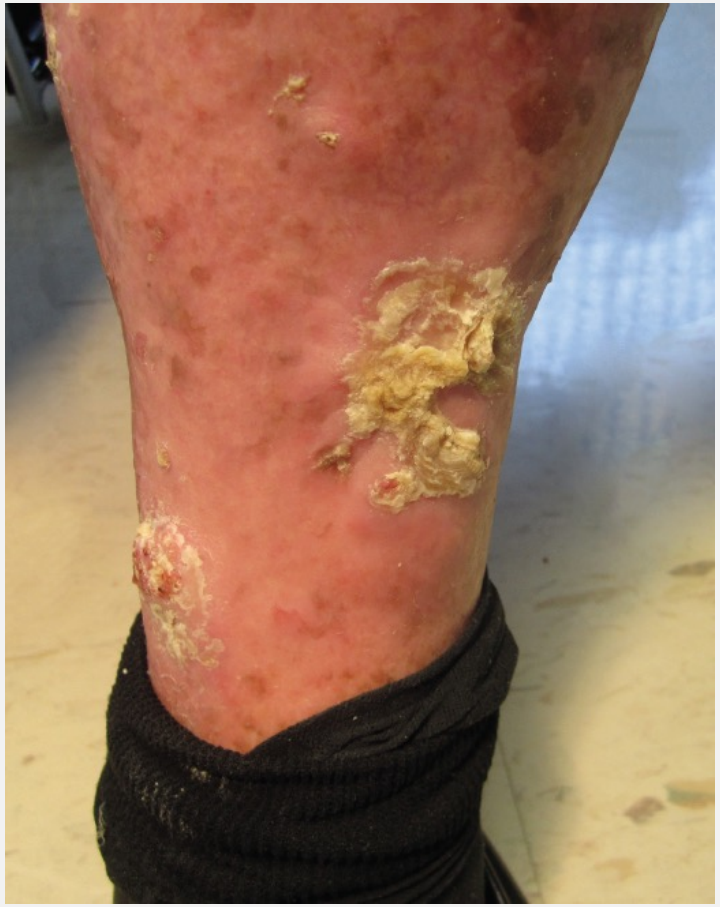


CLINICAL PRESENTATION

Where is it found on the body?

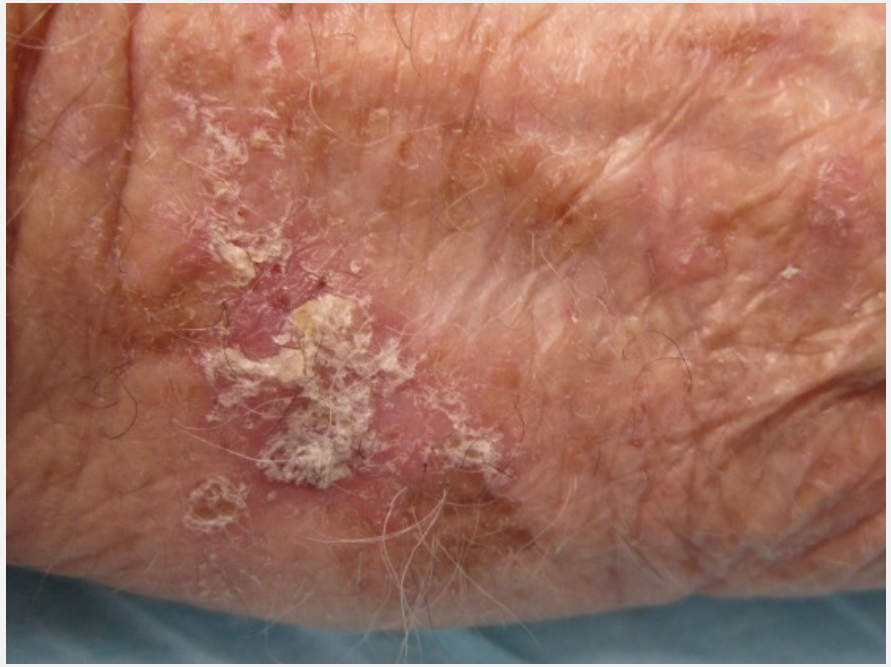
- **Sun exposed areas** – face, hands, lips, areas of thinning hair, anterior lower extremities
- Areas of previous injury (scars, burns)
- Nails
- Can develop in areas with little to no sun exposure
  - Mouth
  - Anus
  - Genitals

SCC CLINICAL PRESENTATION



- Rough-feeling area, often red and scaly
- Raised round growth with/without raised borders
- Sore that won't heal or recurs
- Brown spot that resembles an age spot
- Cutaneous Horn
- Wart-like
- Sore developing in a previous scar
- Complaints of itching, tenderness, soreness

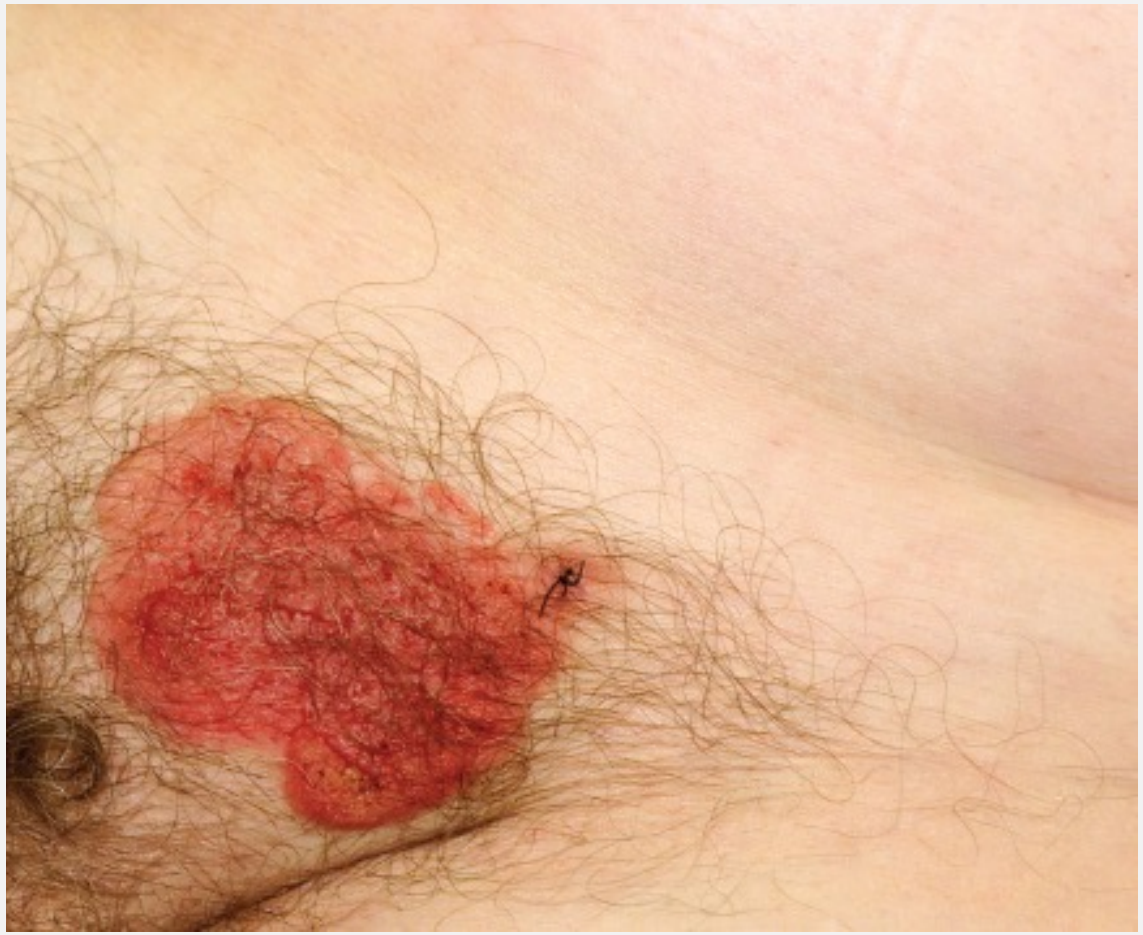
CLINICAL PRESENTATION: SCC *IN SITU*



Squamous Cell Carcinoma *in situ*

- Atypia is seen throughout the entire epidermis, but has not invaded the dermis
- Most common in sun exposed areas
- Erythematous patch or plaque
- Can be pigmented
- Can be tender, bleed, ulcerate
- 3-5% potential risk to progress to invasive SCC if left untreated
- Can be misdiagnosed as dermatitis

CLINICAL PRESENTATION
SCC *IN SITU* SUBTYPES



Bowen's Disease

- SCCis, Found in hair bearing epithelium
- Often in areas with limited sun exposure
- Can be misdiagnosed as dermatitis

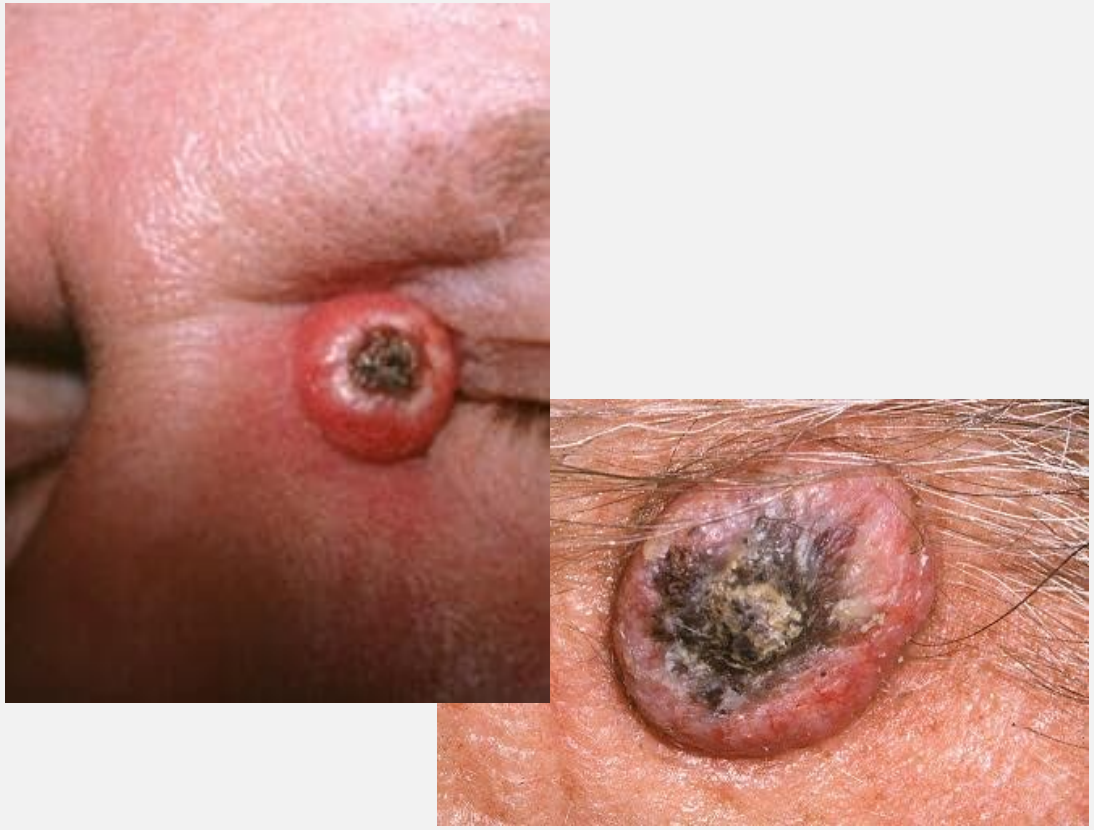
Bowenoid Papulomatosis

- SCCis, Thought to be due to HPV
- Often occur in the genitals
- Well demarcated red papules or plaques that can ooze or crust

Erythroplasia of Queyrat

- SCCis, develops on the glans and prepuce of penis
- Often in uncircumcised, older men
- Solitary, shiny, red, well-defined plaque that can ulcerate. Often is not tender

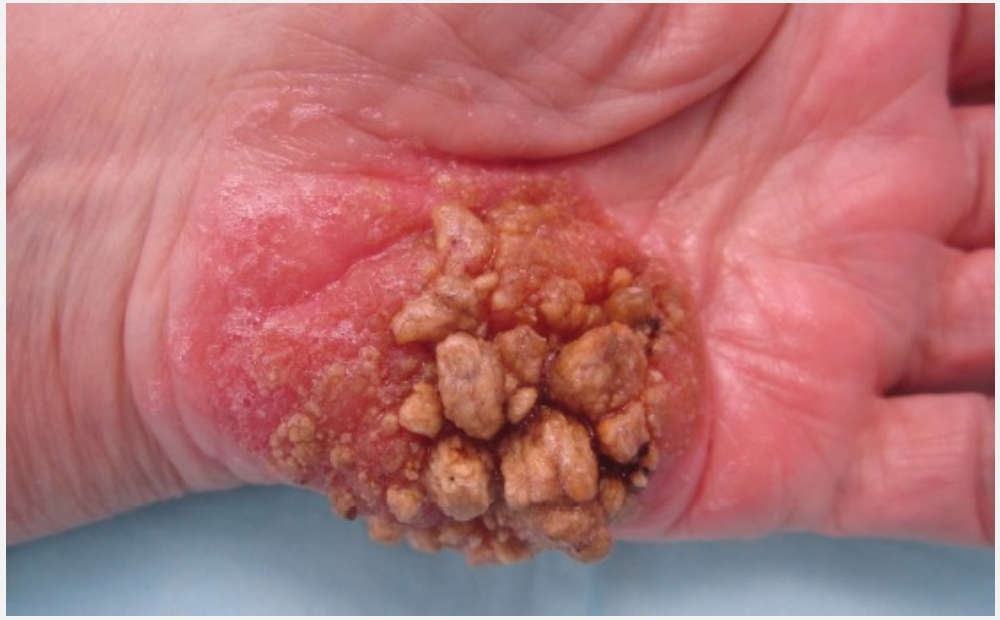
CLINICAL PRESENTATION: KERATOACANTHOMA



Keratoacanthoma

- Low-grade SCC variant
- Sun exposed areas
- Firm, dome shaped, flesh to red colored papule
- May have central crusting or horn
- Can be tender
- Fast growing, can grow 1-2 cm within weeks
- Resembles a “volcano”

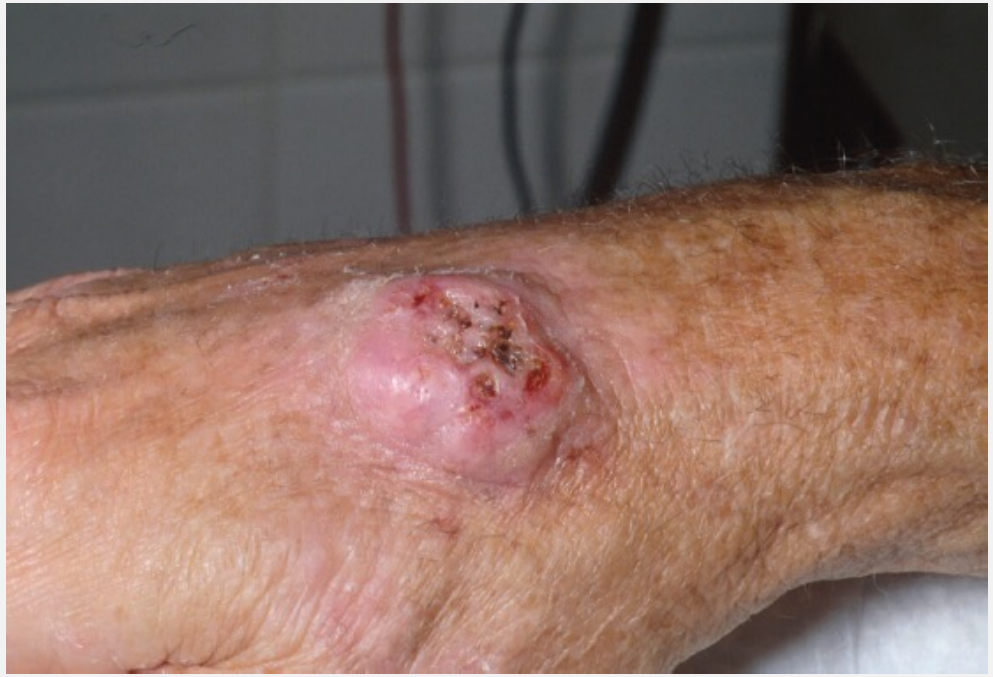
CLINICAL PRESENTATION: VERRUCOUS CARCINOMA



Verrucous Carcinoma

- Low-grade SCC variant
- Due to HPV
- Found in the genitals, oral area, soles of foot, hands, areas of chronic irritation
- Can be misdiagnosed as a plantar wart

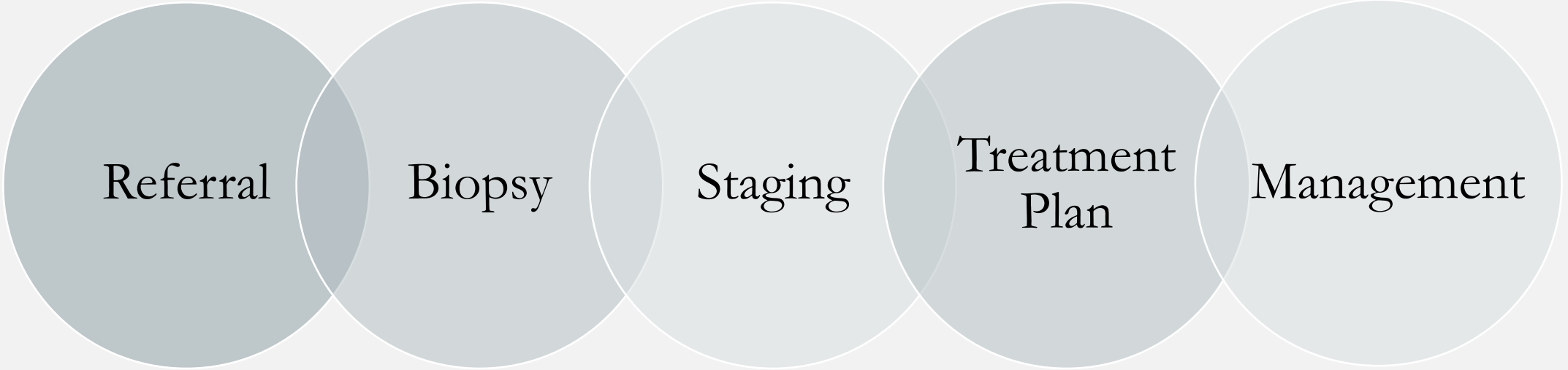
CLINICAL PRESENTATION: INVASIVE SCC



Invasive SCC

- Sun exposed areas
- Can be smooth or hyperkeratotic
- May develop cutaneous horn
- Can present as a papule, plaque, nodule
- Can indurate and ulcerate over time
- Can bleed, be tender or painful

DIAGNOSIS & NEXT STEPS

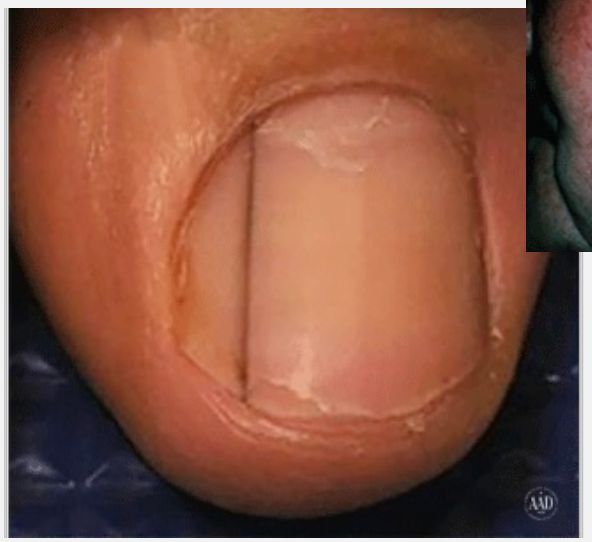


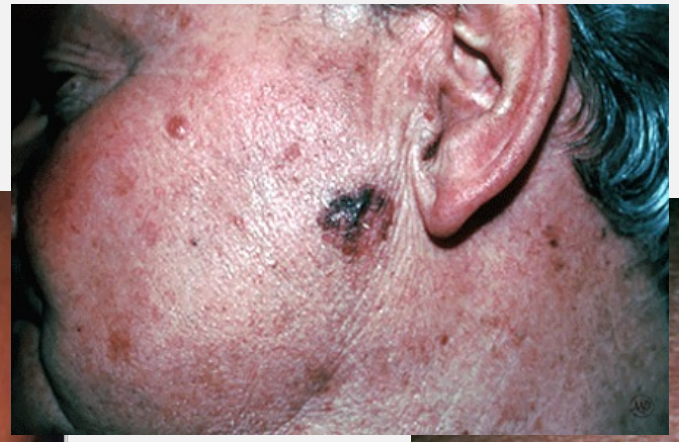
RISK ASSESSMENT & TREATMENT: NMSC

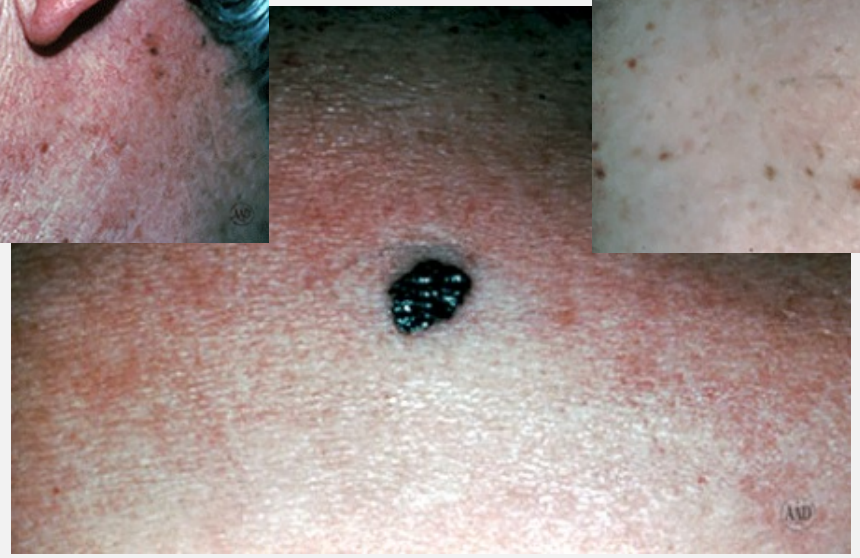
- **Low Risk vs. High Risk?**
  - Location
  - Size/Depth
  - Histology
  - History

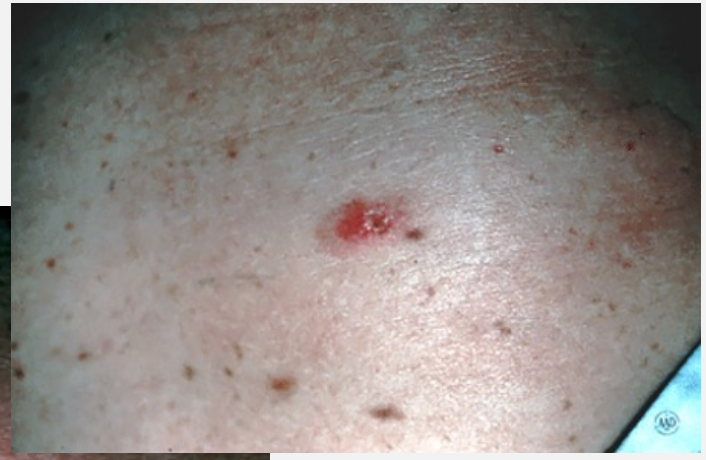
- **Low Risk**
  - Surgical (Excision, Electrodessication & Curretage)
  - Nonsurgical (Topical Imiquimod, Topical 5-FU, XRT)
- **High Risk**
  - MOHs, excision, XRT, Immune Checkpoint Inhibitor, Hedgehog Pathway Inhibitors

CUTANEOUS MELANOMA





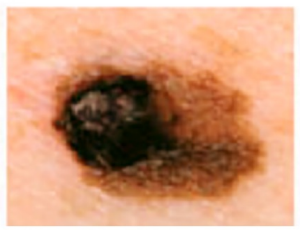




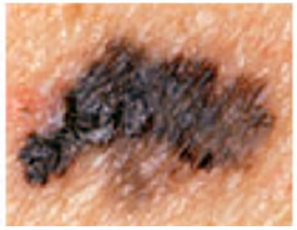
RISK FACTORS

- Intense or prolonged sun exposure
- Hx of Skin Cancer
- Tanning bed use
- Immunosuppressed
- Blistering sunburns
- Fair skin, light colored eyes, red or blonde hair, tendency to burn, inability to tan
- Hx Breast or Thyroid Cancer
- Family History of Melanoma
- Genetic Mutations (CDKN2K, BRAF, NRAS, MC1R, and BRCA2)
- Age over 50 years old
- Certain Moles
  - Over 50 moles
  - Mole that covers large surface area (ex. Congenital nevus)
  - 1 or more atypical moles

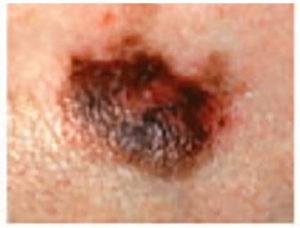
ABCDES & EFGS OF MELANOMA



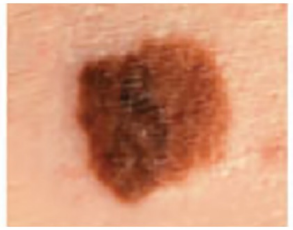
A is for **Asymmetry**



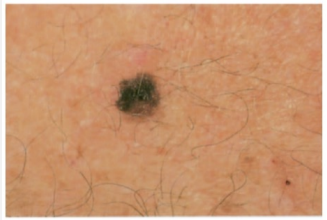
B is for **Border**



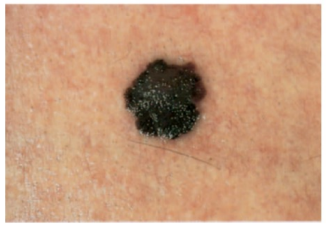
C is for **Color**



D is for **Diameter or Dark**

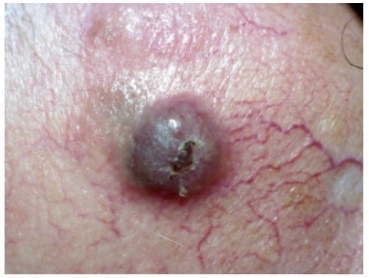


E is for **Evolving** (Before)

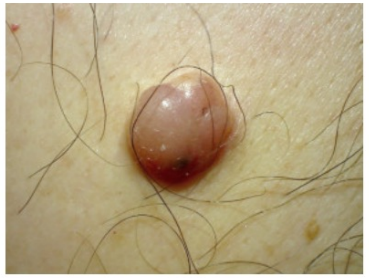


E is for **Evolving** (After)

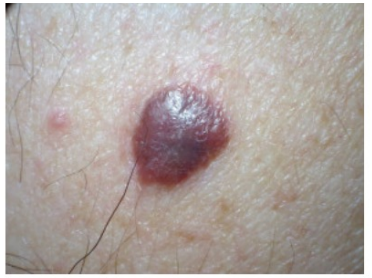
Nodular melanoma with EFG characteristics



Nodular melanoma

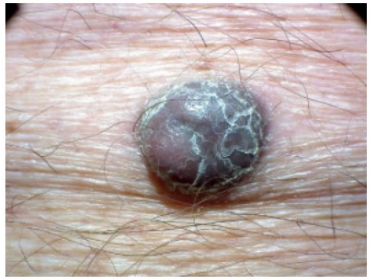


Nodular melanoma

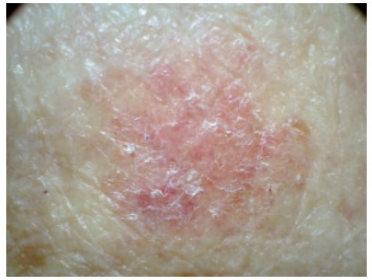


Nodular melanoma

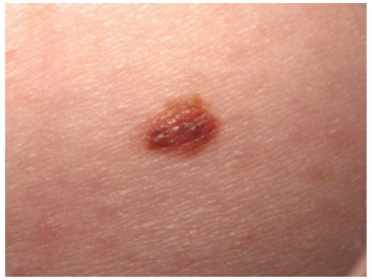
Melanomas without ABCDs



Nodular melanoma

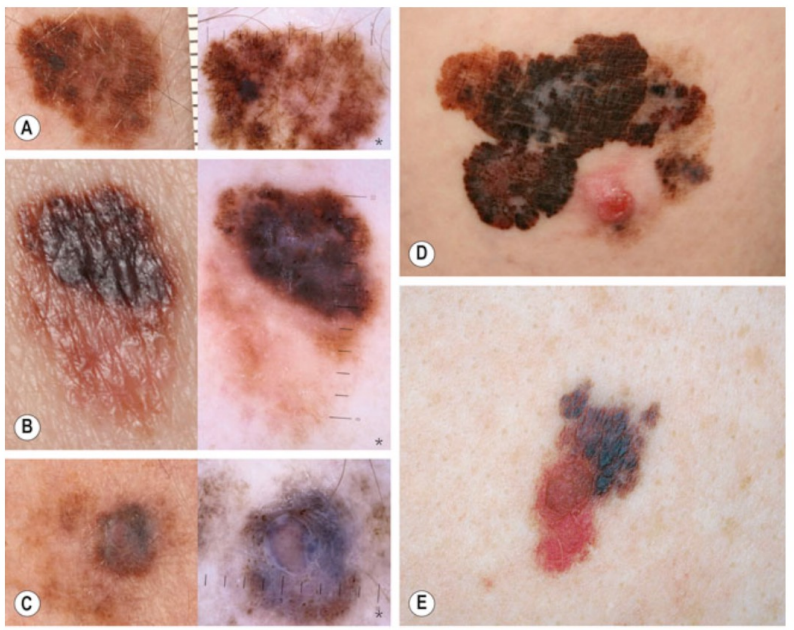


Amelanotic melanoma



Small melanoma

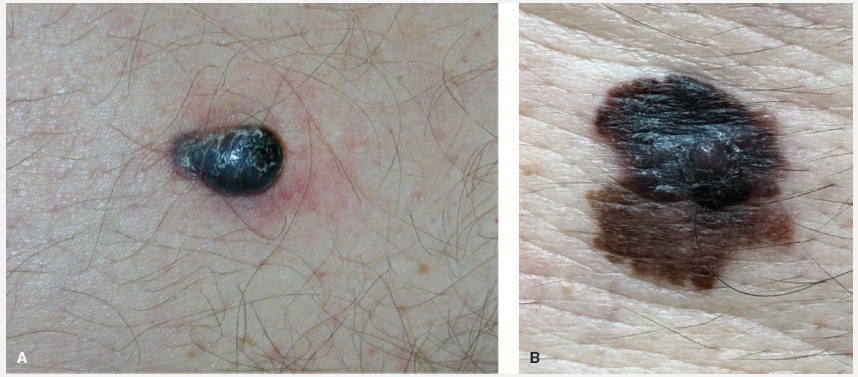
CLINICAL PRESENTATION



Superficial Spreading Melanoma

- Most common type of Melanoma
- Think ABCDEs
- Flat or slightly raised
- Often with multiple colors (brown, black, pink, blue)
- Most commonly diagnosed in the fourth to fifth decade and on the trunk
- Often preceded by a pre-existing nevus
- Slow-growing

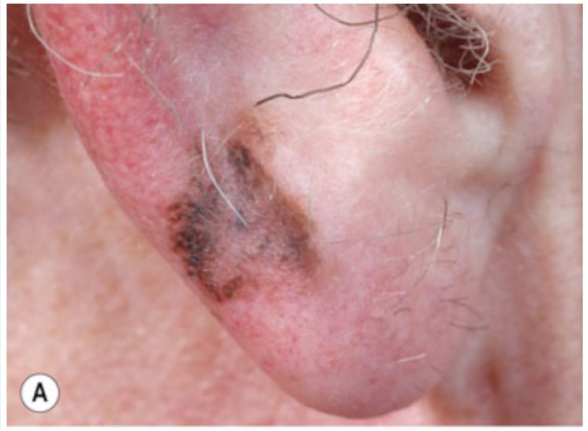
CLINICAL PRESENTATION

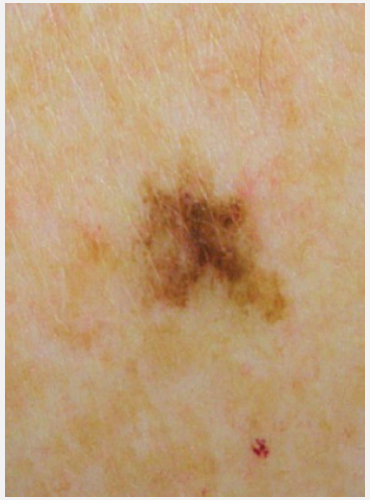


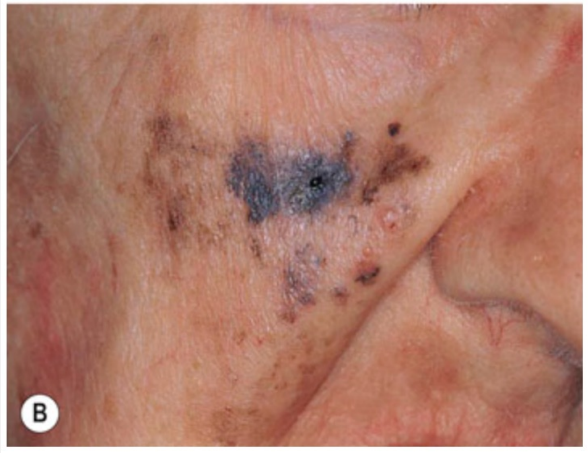
Nodular Melanoma

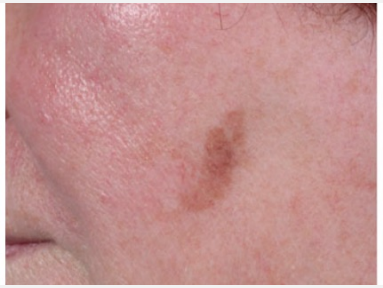
- Most aggressive type of Melanoma
- Found mostly on back or extremities
- Fast growing
- Dark brown to black papule, but can be pink or amelanotic
- Can ulcerate and become friable
- Can be mistaken for BCC or SCC
- More often *de novo*
- Usually diagnosed at an advanced stage

CLINICAL PRESENTATION





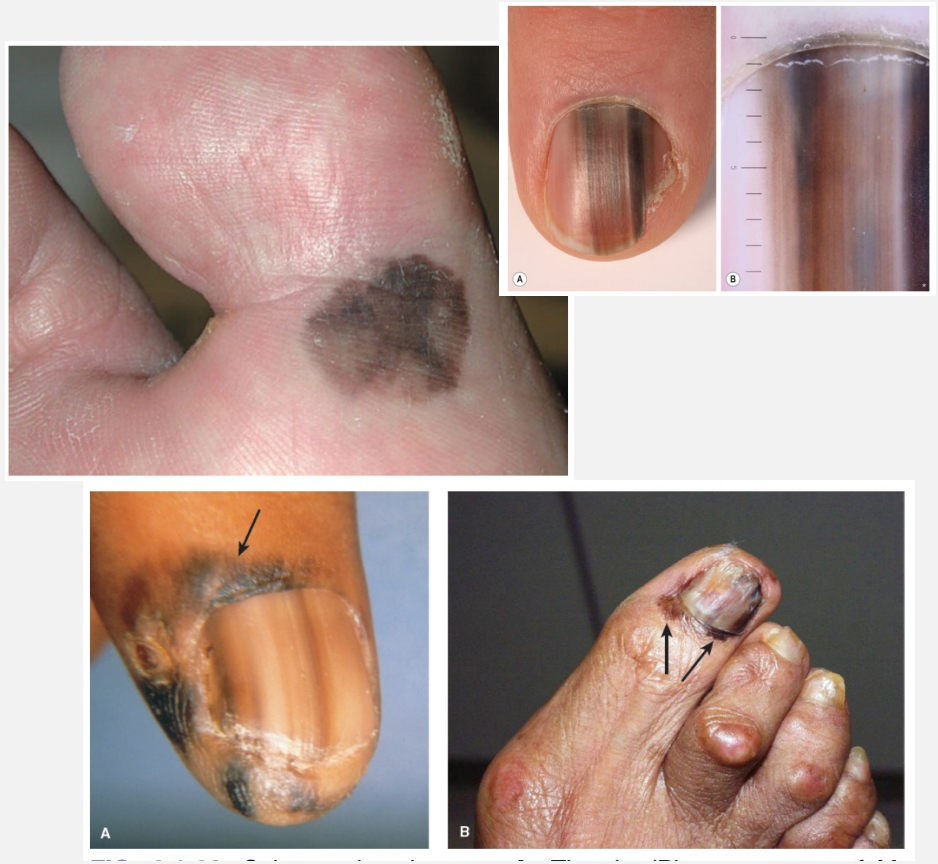




Lentigo Maligna

- Sun exposed areas (temples, cheeks, nose)
- Diagnosed most often 6th to 7th decade
- Irregular, mottled macules
- Brown color with variegated pigment
- Often hidden within sun damaged skin and solar lentigines
- Can be misdiagnosed as a solar lentigo

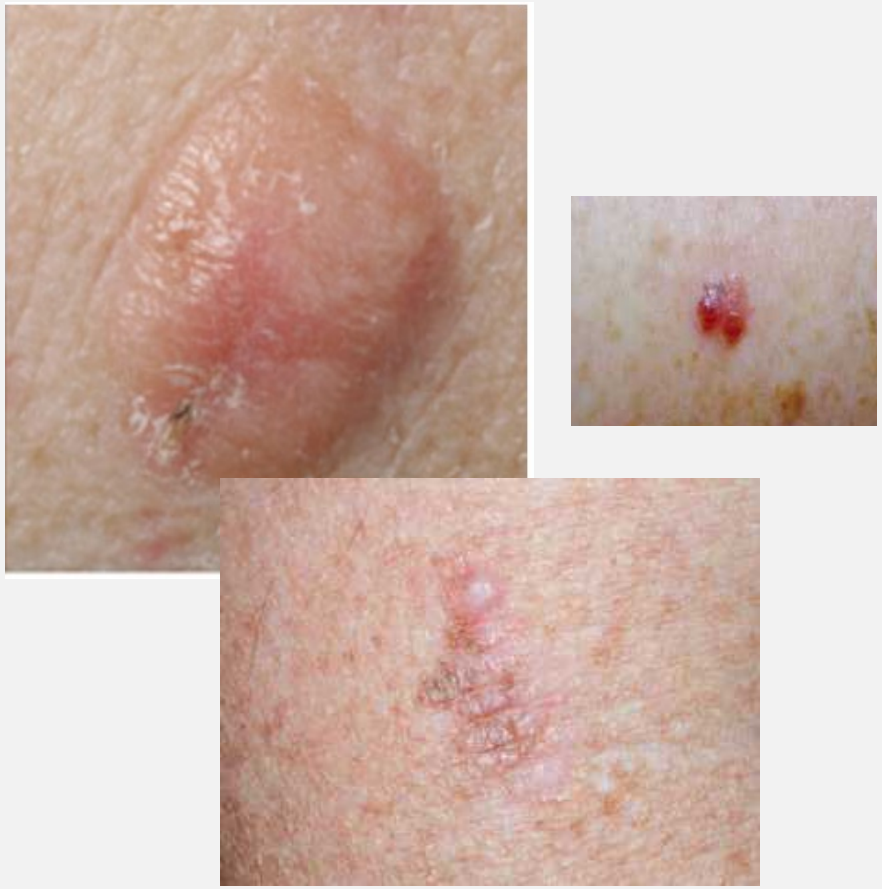
CLINICAL PRESENTATION



Acral Melanoma

- Pigmented macules
- Most commonly found on the plantar aspect of the sole. Also seen on palms and subungual area
- Accounts for 20% of melanomas in those with skin of color compared to 2% of Caucasians
- Can be misdiagnosed as a hematoma
- Poor 5-year survival rate (25% to 51%) due to delayed diagnosis or misdiagnosis
- Subungual melanomas present as longitudinal pigmentation or diffuse nail discoloration.
- Watch for the Hutchinson sign (pigment extends to the proximal nail fold)

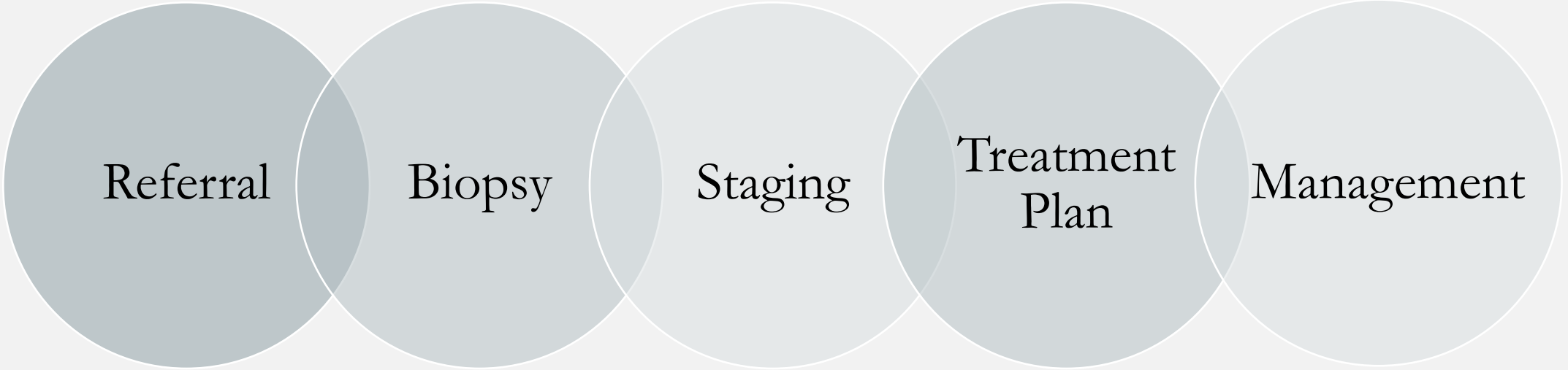
CLINICAL PRESENTATION



Amelanotic Melanoma

- Presents as pink or flesh colored macules, papules, plaques
- Does not fall under the ABCDEs
- Think Ugly Duckling Sign
- Listen to patient's concerns
- Mimics benign lesions
- High level of misdiagnosis

DIAGNOSIS & NEXT STEPS



STAGING & TREATMENT: MELANOMA

- **Staging**
  - Tumor Thickness & Ulceration (Breslow Depth)
  - Node Involvement
  - Metastasis

+/- Referral

- **Treatment**
  - Re-excision
  - Sentinel Lymph Node Biopsy
  - Radiation
  - Systemic Therapies - Chemotherapy

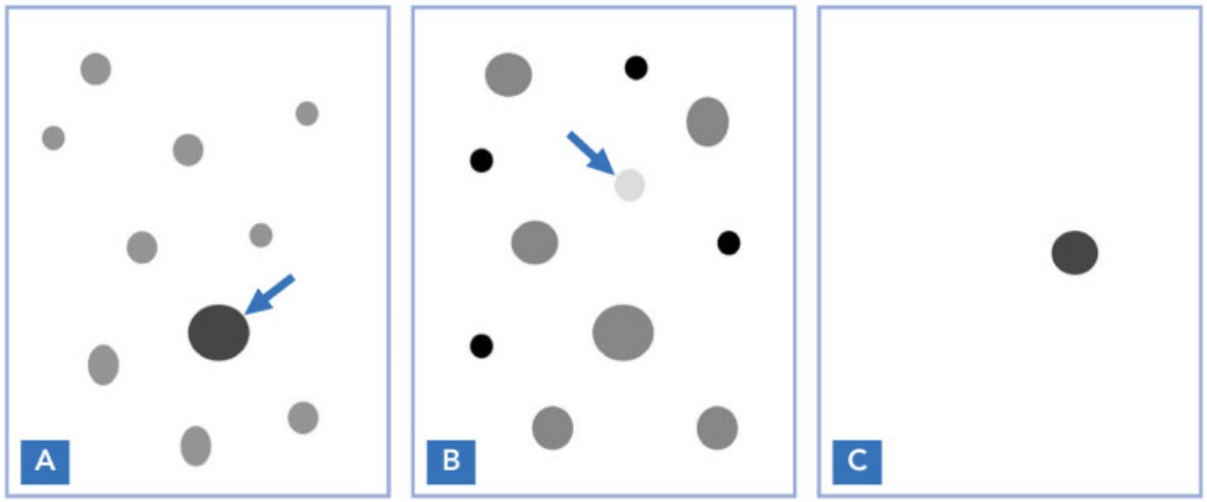


Figure 1. Three Examples of an Ugly Duckling

CLINICAL PEARLS - MELANOMA

- "Five Foot View"
- Ugly Duckling Sign
- ABCDEs and EFGs
- Listen to the patient even if the lesion presents with benign characteristics
- Total Body Skin Exams
- Biopsy the Entire Lesion
- Refer early and often if there is any suspicion – early diagnosis is key to survival!

KEY TAKEAWAYS & CONSIDERATIONS

- Patient education is key for skin cancer prevention and detection
- If there is any doubt/concern/suspicion, biopsy (when appropriate) or promptly refer to dermatology
- Anyone is at risk for skin cancer regardless of skin color or age
- There are multiple other subtypes of the 3 most common skin cancers as well as other skin cancers and neoplasms of the skin
- Up-to-date guidelines regarding diagnosis and treatment recommendations for BCC, SCC and Melanoma should guide treatment plans and management

QUESTIONS

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