Malignant Skin Tumors

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LF MU

Nonmelanoma skin cancer (NMSC)

- Basal cell carcinoma
- Squamous cell carcinoma
- Actinic keratosis
- Angiosarcoma
- Dermatofibrosarcoma protuberans
- Merkel cell carcinoma
- Sebaceus gland carcinoma
- Skin metastasis
- T and B cell lymphoma

Basal cell carcinoma (BCC)

- First mentioned by Jacobsom in 1824
- More common than melanoma
- Yearly increase in incidence worldwide
- Incidence doubles every 25 years
- 19 x more common in caucasians
- 26 distinct sub types...

Basal cell carcinoma (BCC)

- Originates from pluripotent cells of the basal layer of the epidermis and the terminal hair follicle
- A slow-growing tumor with virtually no potential to establish metastases
- Grows locally destructively
- Nodular, superficial, with pigment, sclerodermiform, infiltrative, fibroepithelial (Pinkus), metatypical

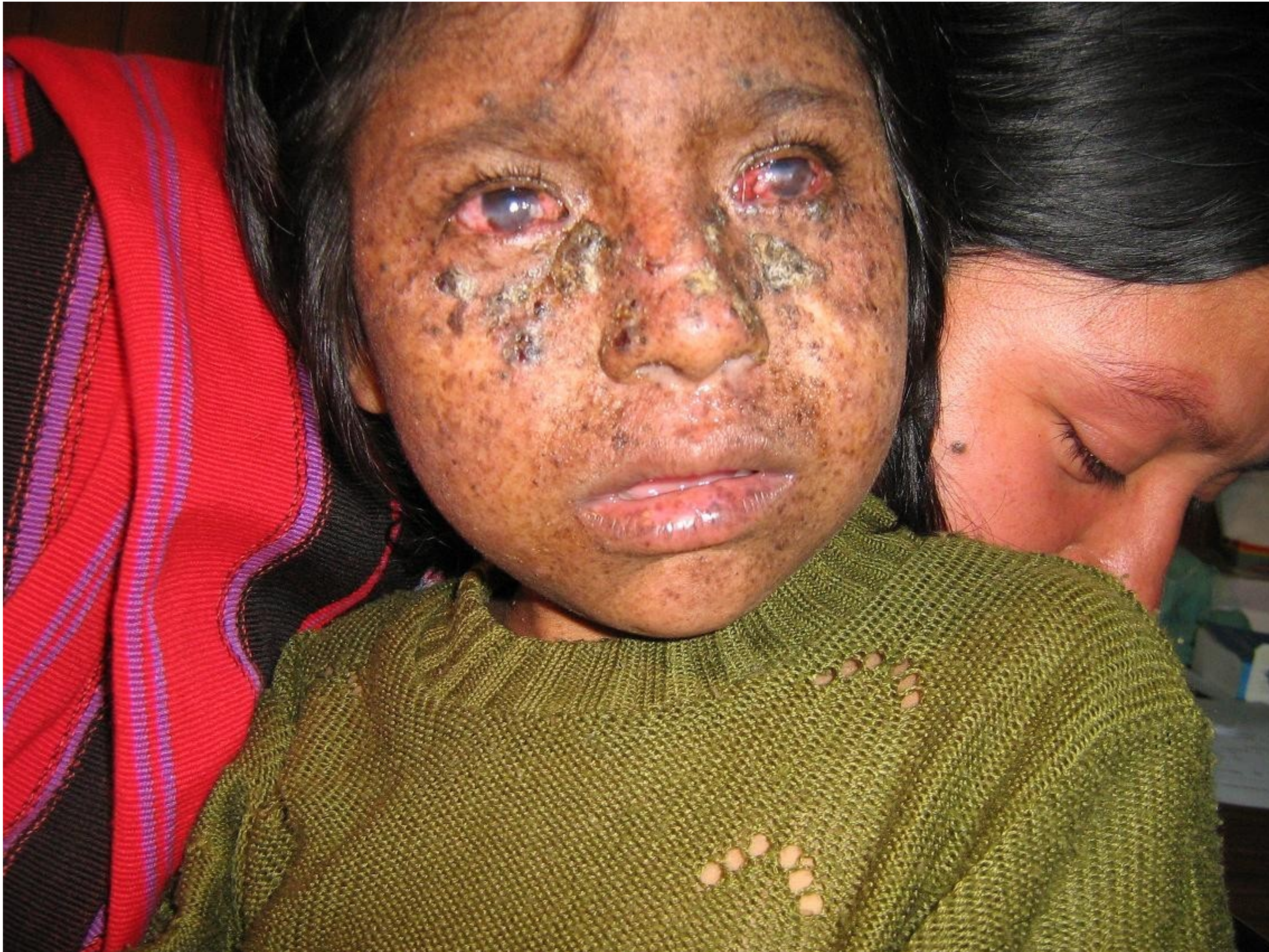
Basal cell carcinoma (BCC) risk factors

- UV radiation, mainly UVB, less UVA (melanoma)
  - The probability of occurrence increases in direct proportion to the cumulative dose of UV radiation
  - The latency period from radiation to clinical manifestation is about 20-30 years
  - Exterior workers ↑ risk
  - Frequent occurrence in the H line

Basal cell carcinoma (BCC) risk factors

- Phototype of the skin, geographical location.
- Immunosuppression
- Mainly transplanted patients
- Genetic factors (Gorlin sy., Xeroderma pigmentosum)
- Carcinogens (arsenic)

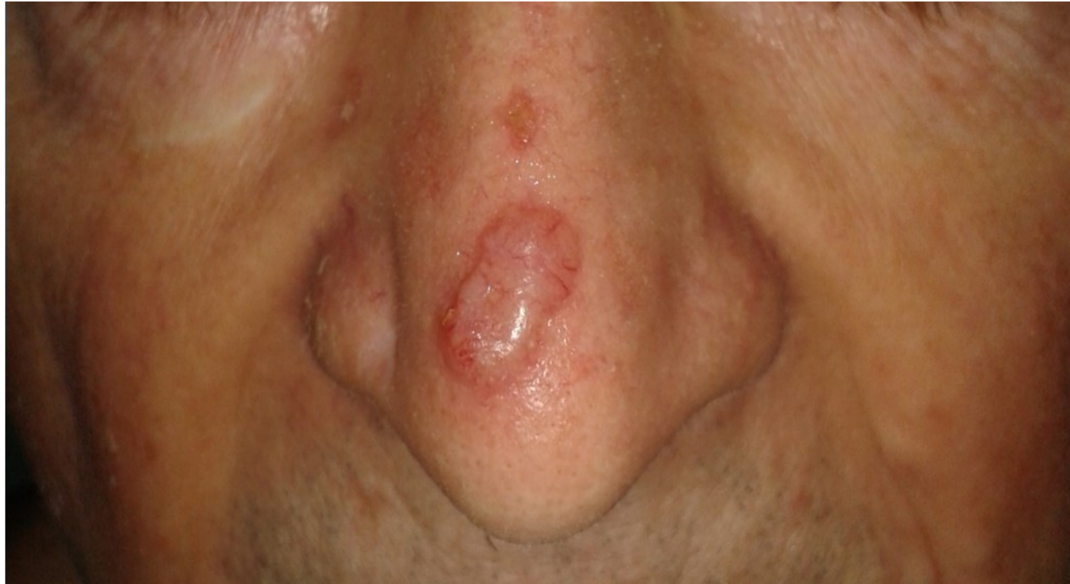
Xeroderma pigmentosum

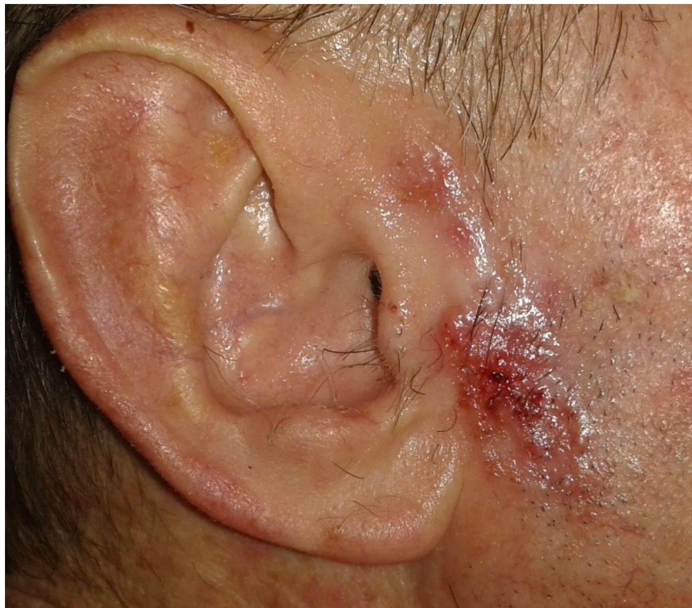


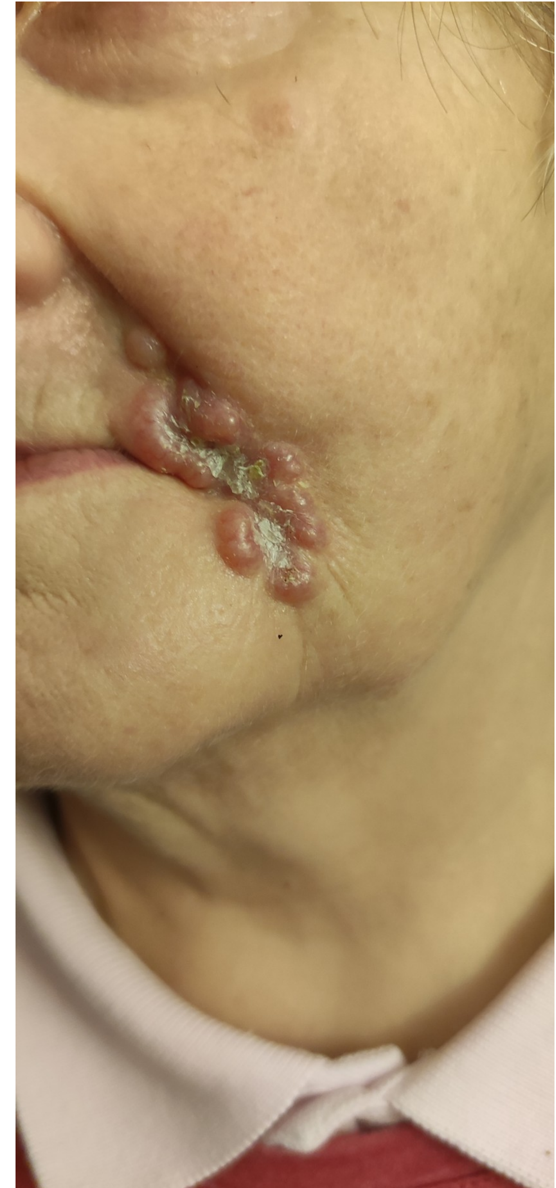
Nodular BCC

- The most common form (60%)
- Location mainly neck and head
- Shiny, rigid papule, or knot with telangiectasias
- Gradually central depression with bulging edges (painless), ulcus rodens

Nodular BCC



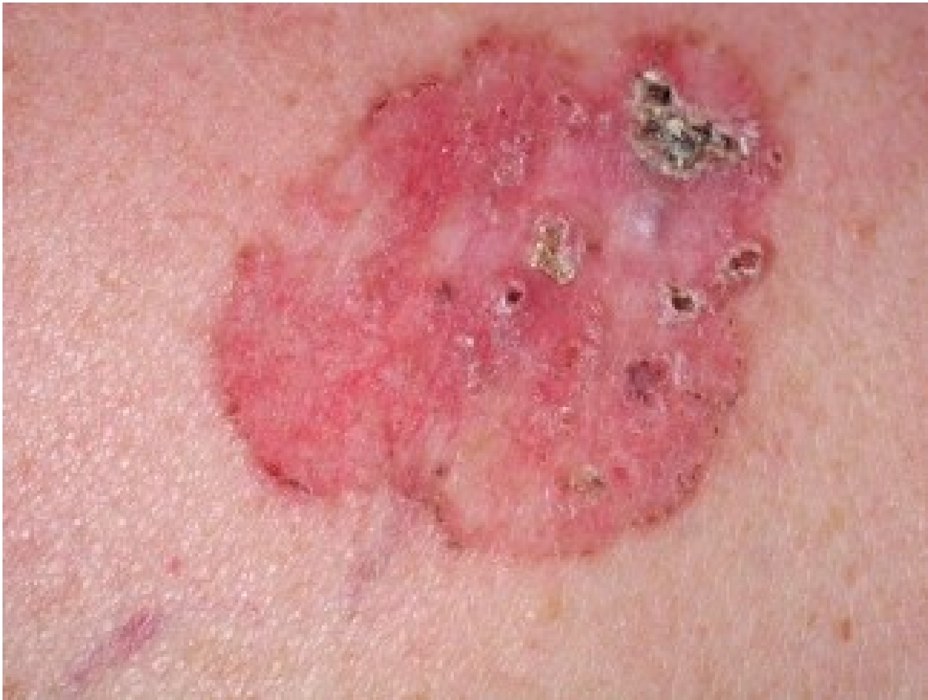


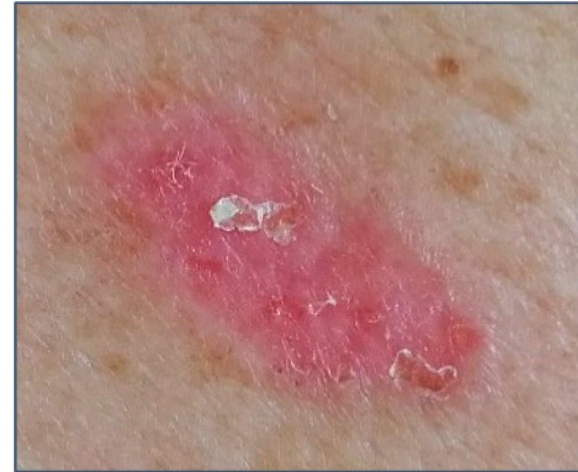


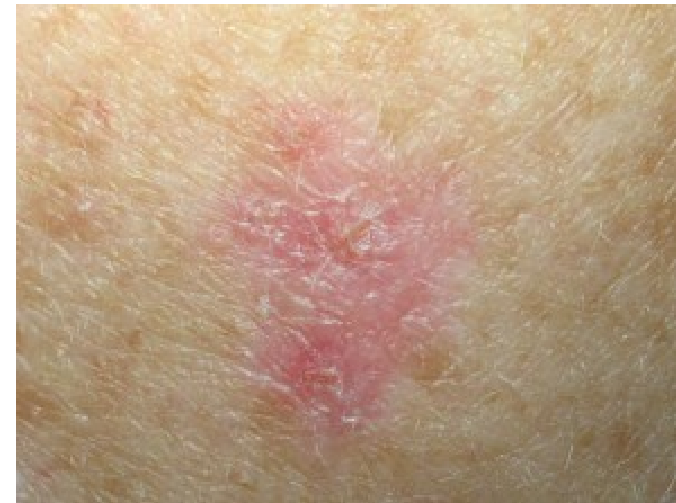
Superficial BCC

- Makes up about 15 - 30%
- Location mainly torso and limbs
- Easily infiltrated, sharply demarcated bearings
- Sometimes desquamation and hemorrhagic crust formation

Superficial BCC



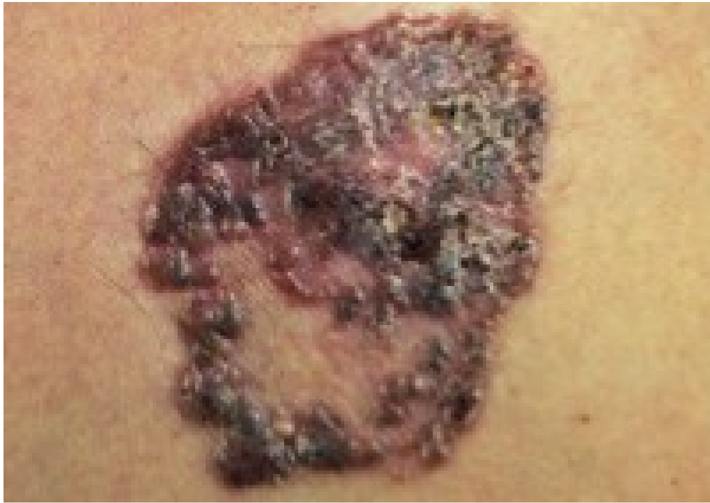


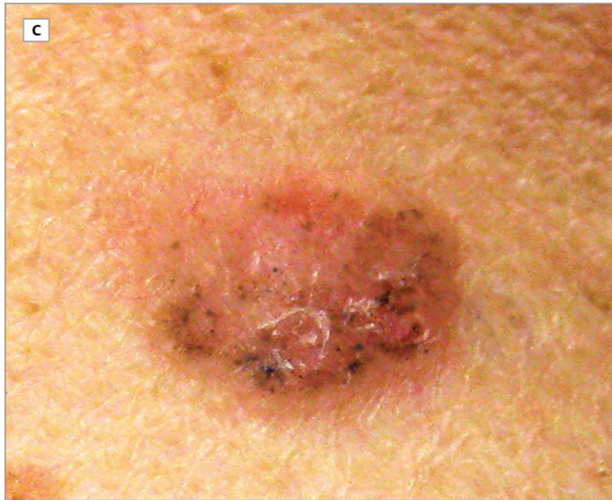


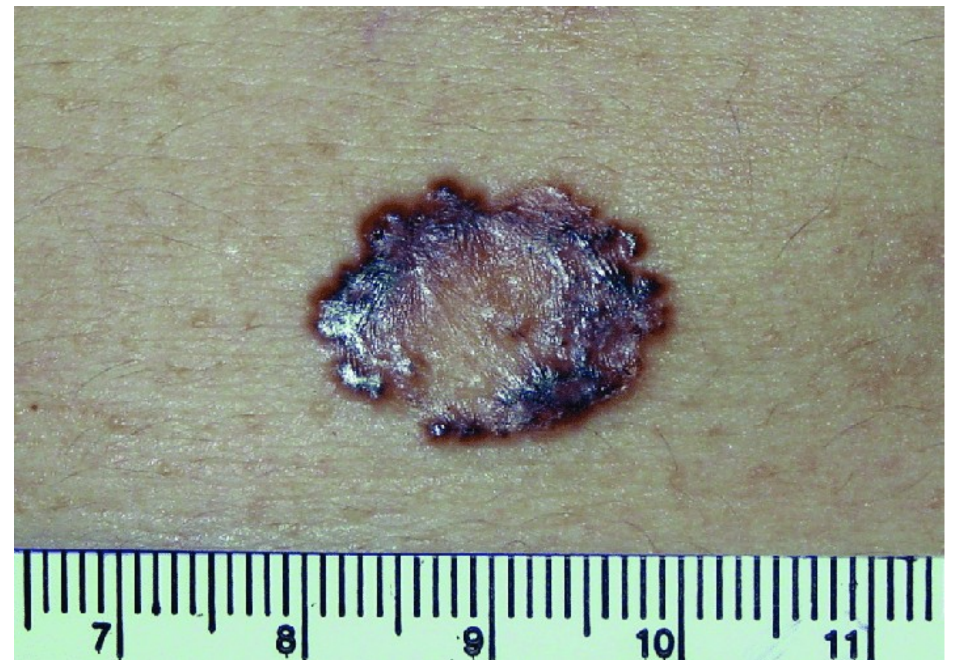
Pigmented BCC

- The structure most often resembles nBCC
- Pigmented areas
- Diff. dg. Malignant melanoma should be considered

Pigmented BCC







Therapy

- Invasive methods
- Surgical excision
- Mohs surgery
- Cryotherapy
- Curettage
- Non-invasive methods
- PDT
- 5% imiquimod (Aldara), 5% fluorouracil (Effudix)
- Brachytherapy

Squamous cell carcinoma (SCC)

- The second most common skin cancer (approx. 20%)
- Epithelial tumor with intraepithelial growth
- It is relatively invasive
- In places of solar damage, or burns or chronic extensive scarring
- 70% head and neck
- It metastasizes via lymphatic system

SCC risk factors

- Age over 50 and male
- Low phototype
- UV exposure
- Chronic skin changes
- HPV
- Chemical carcinogens
- Ionizing radiation

SCC

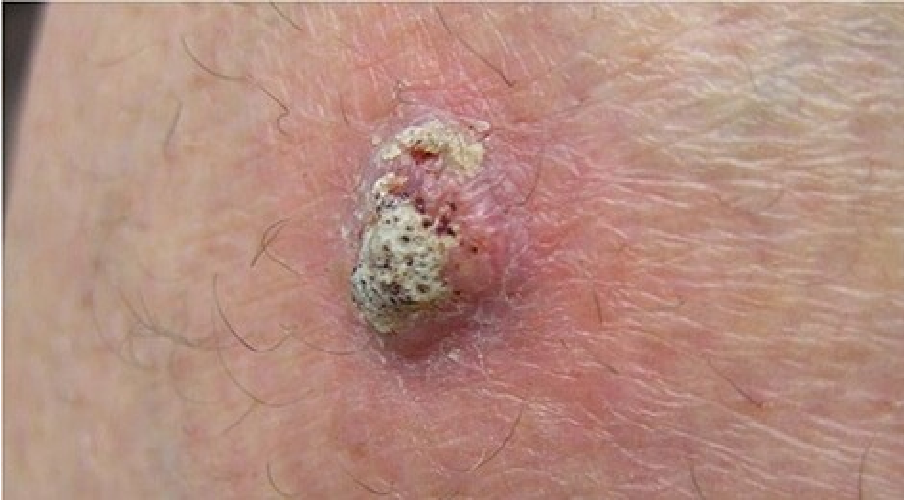
- Several clinical forms
- M. Bowen
- Erythroplasia de Queyrat
- Ulcerative SCC
- Periungual SCC
- Marjolin ulcer
- AK

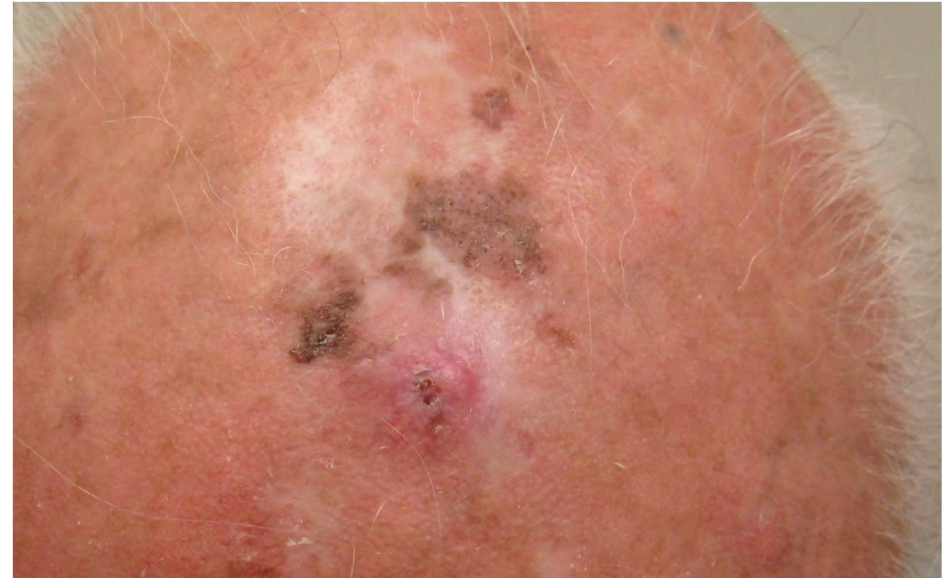
Therapy

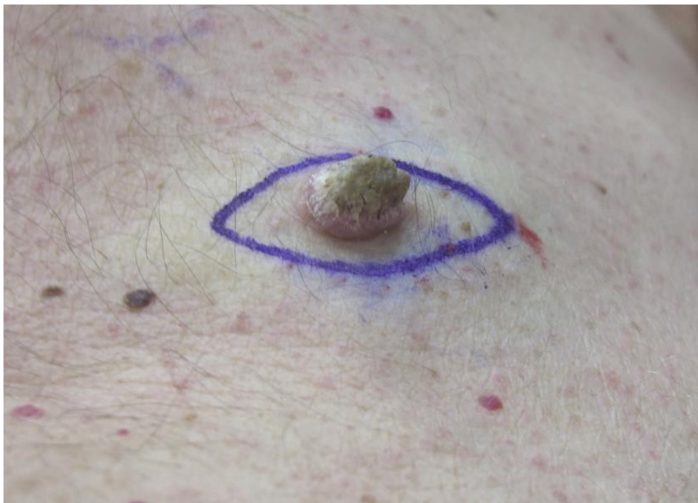
- Radical surgical excision with a protective rim
- Radiotherapy
- Chemotherapy

- Always USG of the lymph nodes

SCC







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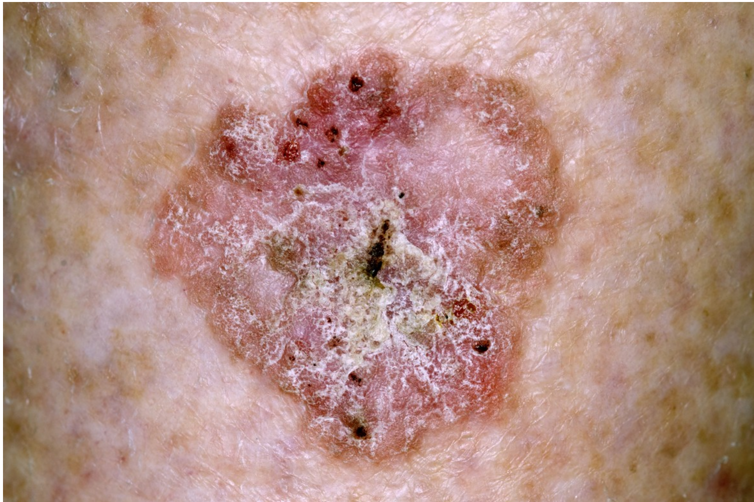

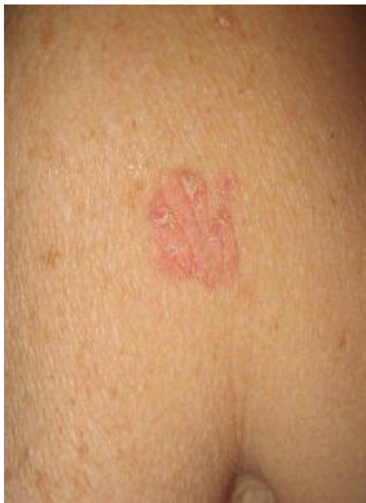

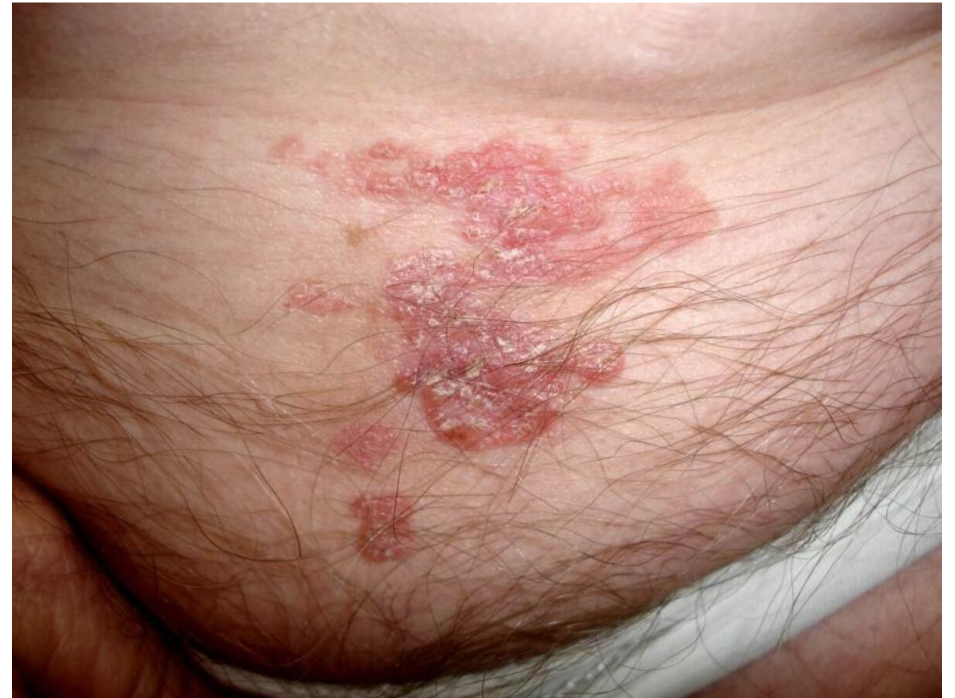

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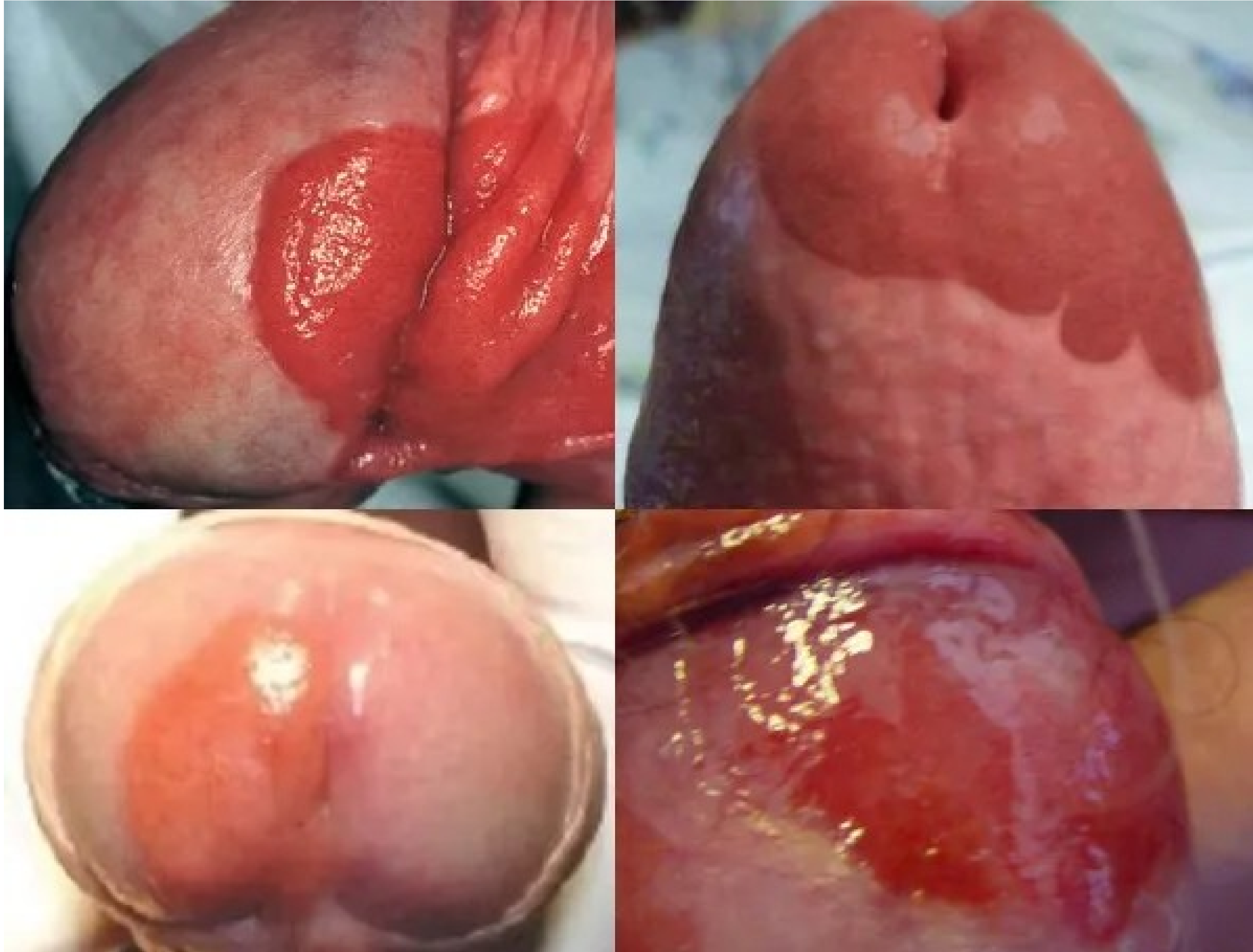
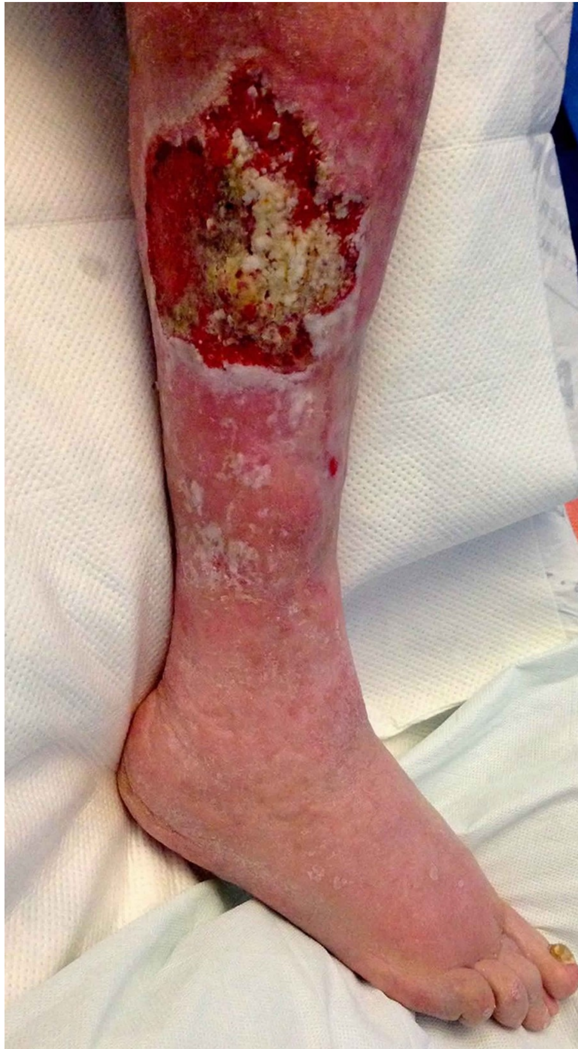
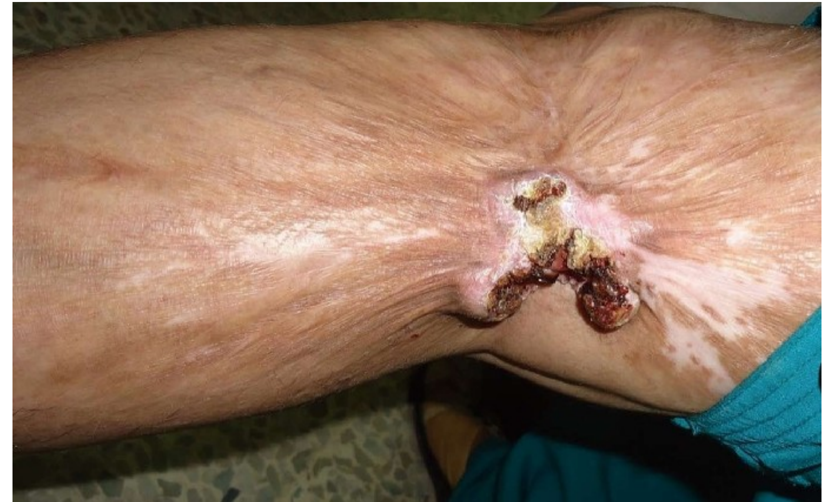
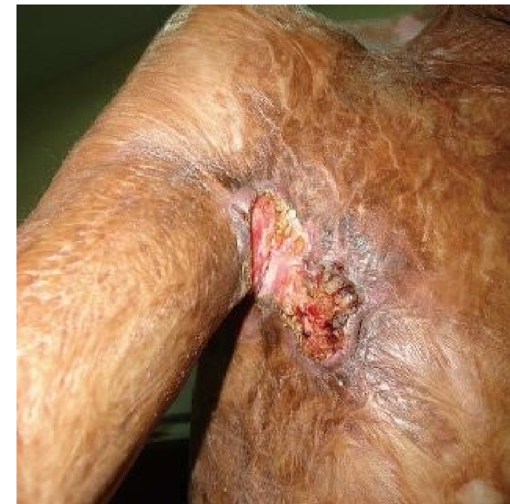


SCC



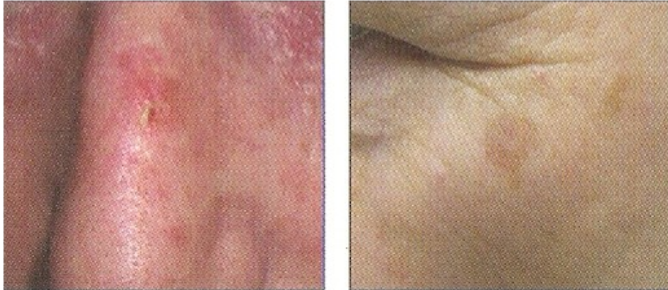




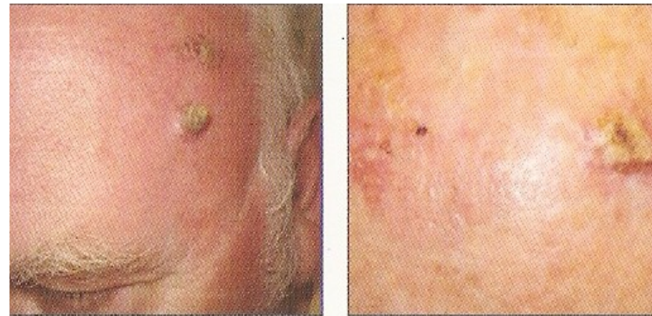
Actinic keratosis (AK)

- Very common epidermal dysplasia
- Sites of chronic solar damage
- 6 to 8 decades most often
- About 10% progresses to SCC
- Extremely common in immunosuppressed individuals
- Academic discussion: Ca in situ vs. Precanc.

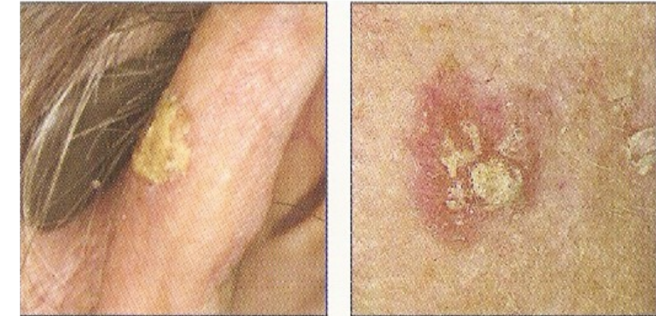
AK



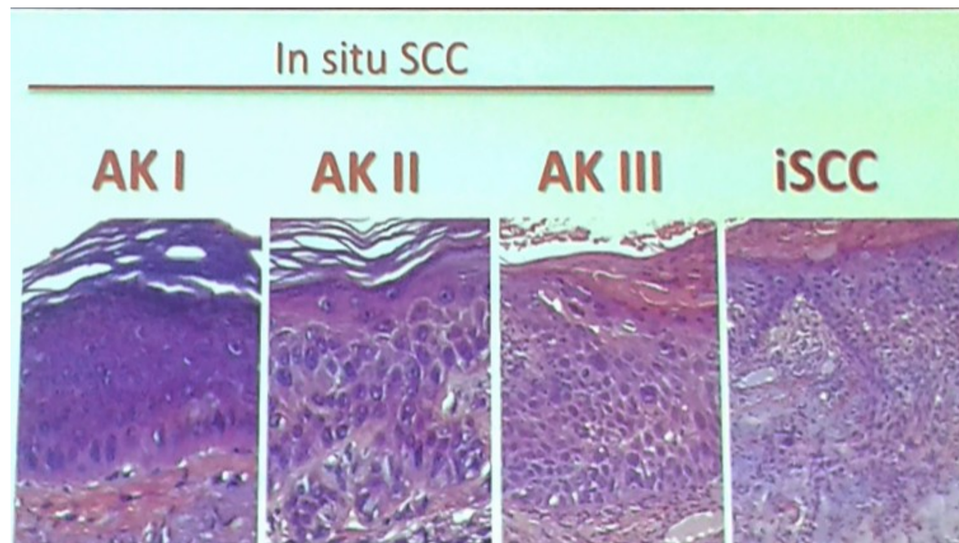
Grade I: Flat, pink maculae without signs of hyperkeratosis and erythema often easier felt than seen. Scale and possible pigmentation may be present



Grade III: Very thick hyperkeratosis, or obvious AK, differential diagnosis includes thick IEC (intra-epidermal carcinoma or SCC)



Grade II: Moderately thick hyperkeratosis on background of erythema that are easily felt and seen



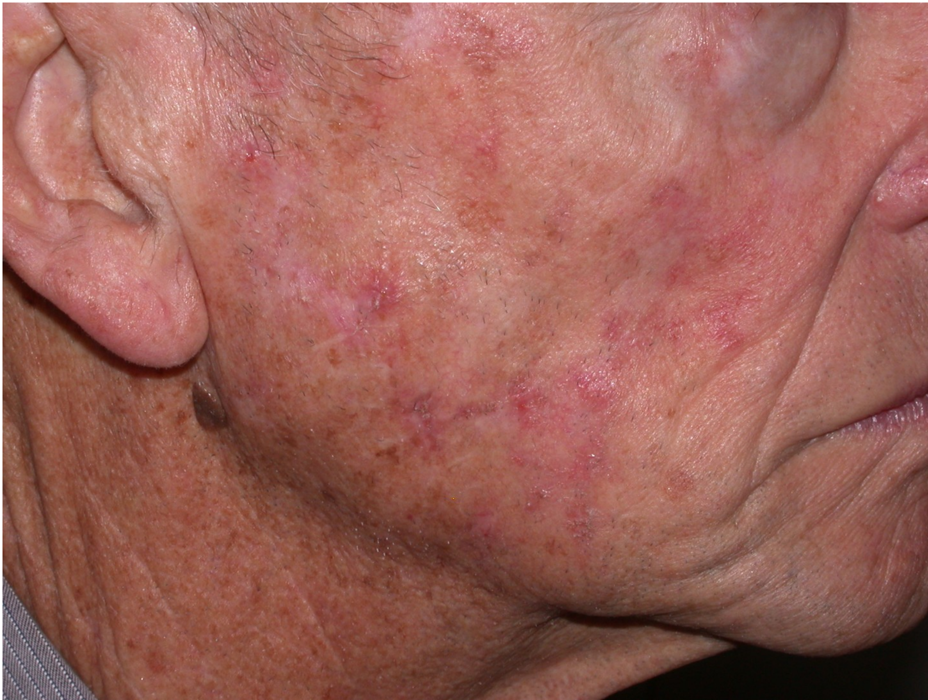
AK

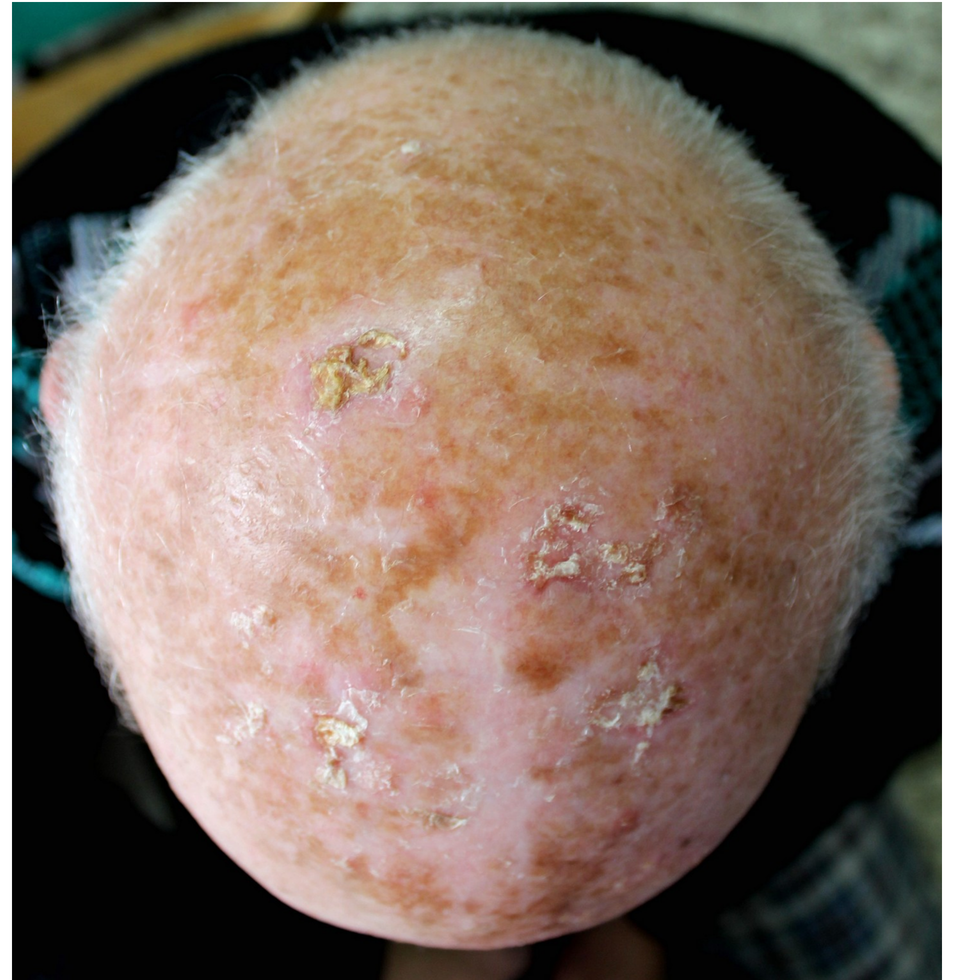
- Characteristic for AK is area carcinogenic spread, the so-called “Field cancerization”
- Presence of 6+ AK in a sun-exposed area
- Risk factors as with other NMSCs

Therapy

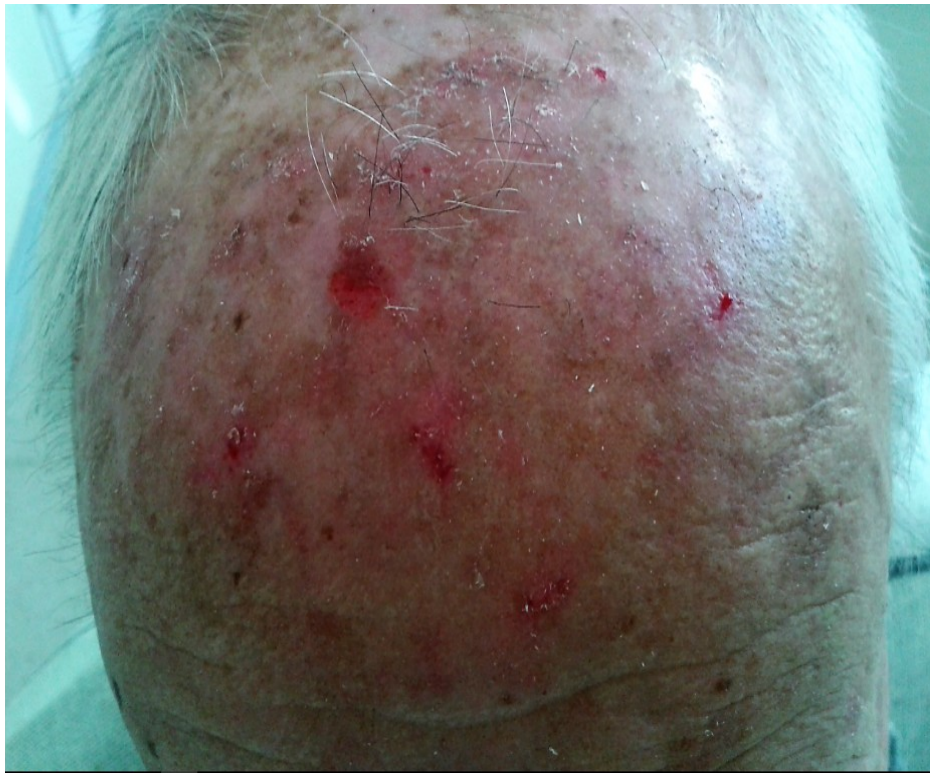
- Prevention, Prevention, Prevention (SPF, etc.)
- May lead to spontaneous regression of AK
- Cryosurgery / curettage
- PDT
- CO_2 laser, ER: YAG laser
- 5% imiquimod (Aldara)
- Ingenol mebutate (Picato)

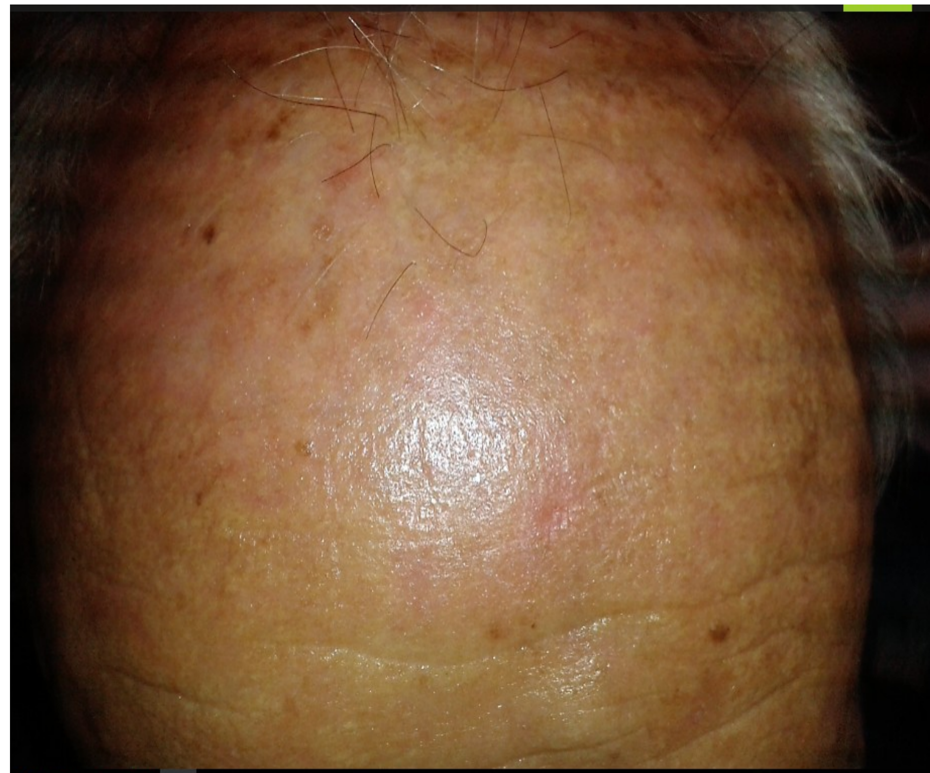
AK





PDT AK

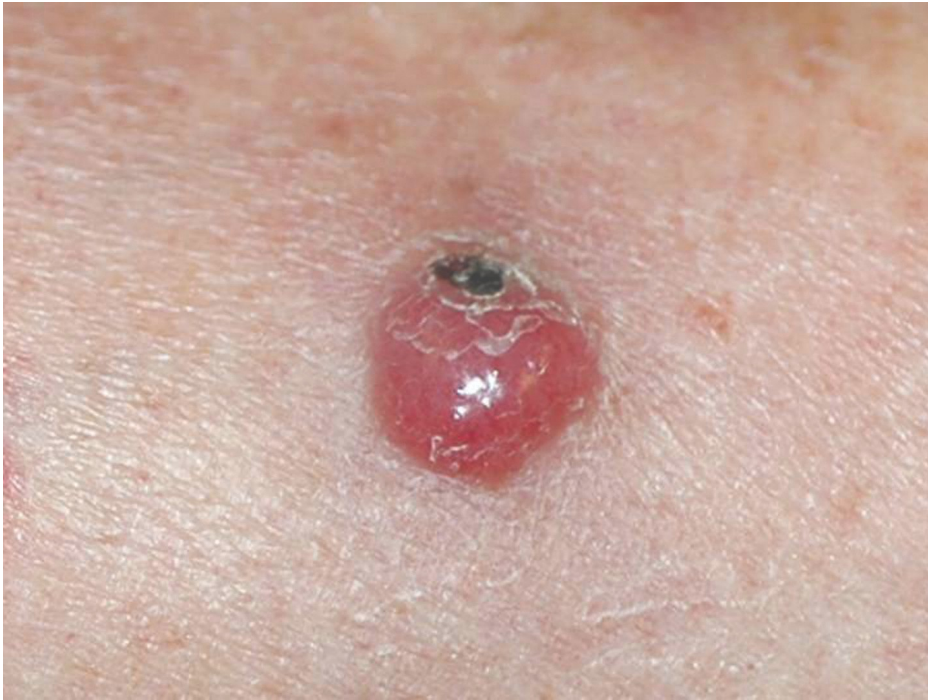


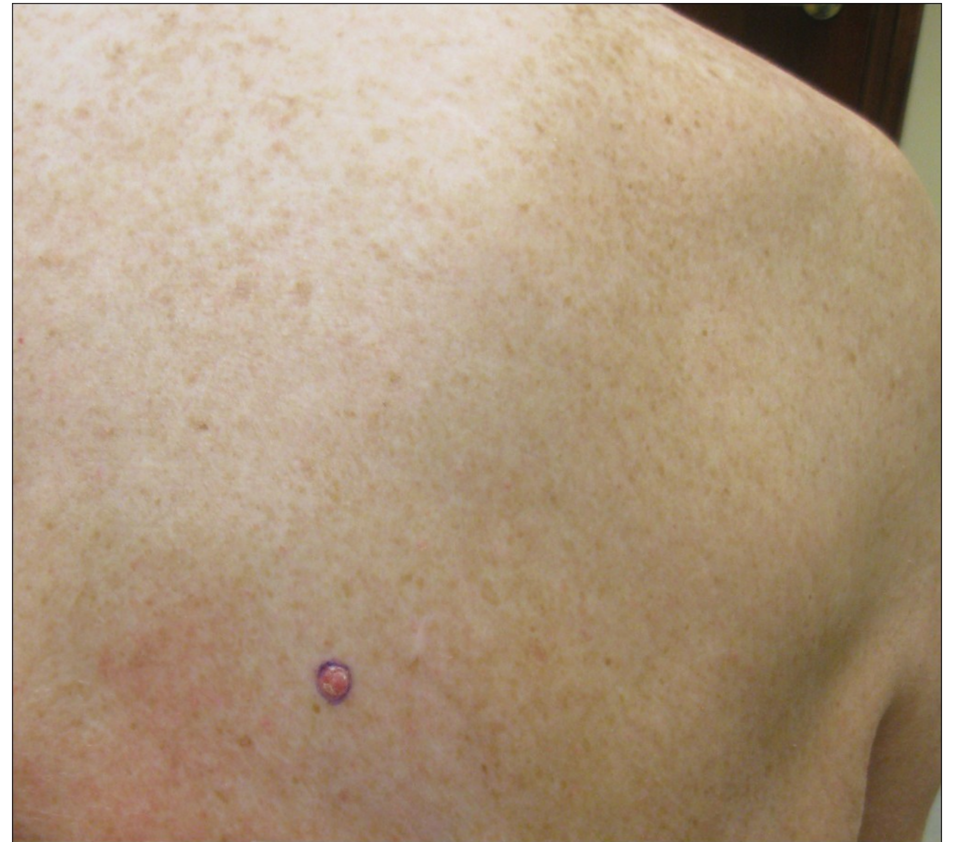


Merkel cell carcinoma

- Rare neuroendocrine carcinoma of the skin
- Fast growing, pink to bluish papule
- Based on Merkel cells (associated with receptors for sensory perception)
- Rapid metastasis (in transit metastasis)

Merkel cell carcinoma





Dermatofibrosarcoma protuberans

- Very rare mesenchymal skin tumor
- Appearance of scar or protuberation with palpable subcutaneous infiltrate beyond exophytic growth
- 0.8 - 4.5 / 1,000,000
- More common in blacks
- Local recurrences are common

Dermatofibrosarcoma protuberans