# Common Epithelial Tumours

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# Common Epithelial Tumours

**Benign** ⟶

1. Melanocytic naevi
2. Seborrhoeic warts
3. Skin tags
4. Dermatofibroma
5. Vascular naevi
6. Pyogenic granuloma
7. Senile angiomas
8. Keratoacanthoma

**Precancerous epithelial lesions** ⟶

1. Actinic (solar) keratosis
2. Intraepithelial carcinoma (Bowen's disease)
3. Leukoplakia
4. Arsenical keratoses
5. Thermal keratoses
6. Chronic radiation keratoses
7. Viral keratoses (EDV, BP)

**Malignant**

1. BCC
2. SCC
3. Malignant melanoma

# Effects of sunlight on the skin

- Melanin pigment protects the dermis from UV light damage
- Insufficient protection in sunny climate ⟶ accelerated ageing of skin
- Tanning (immediate/delayed tanning)
- Damage to dermal collagen and elastin ⟶ solar elastosis
- Damage to the dermal vessels: telangiectases
- Damage to the epidermal cells
  - solar lentigines
  - solar keratoses
  - skin tumours
- Sun exposure may exacerbate certain underlying medical conditions (flares)
  - SLE/DLE
  - porphyria

# Risk factors for development of skin malignancies

- Extrinsic factors
  - UV light (UVB, UVA, PUVA, tanning beds)
  - ionising radiation
  - chemicals (arsenic)
  - HPV
- Intrinsic factors
  - constitutional - fair skin, blond/red hair, blue eyes
  - genetic syndromes - xeroderma pigmentosa, oculocutaneous albinism, dystrophic epidermolysis bullosa, epidermodysplasia verruciformis, naevoid BCC syndrome
  - predisposing clinical settings - photosensitivity (DLE/SLE), scarring, chronic non-healing ulcers
- Immunosuppression
  - organ transplantation
  - drugs
  - AIDS

# ACTINIC KERATOSES

- AK is an epidermal tumour
- Actinic means sun-related
- Keratosis : is not a disease, it is a secondary skin lesion, the end product of abnormal epidermal keratinisation
- 83%of patients are 55yrs./older and 62% are men
- Predisposing factors:
  - Age, sex, ethnic background
  - Cumulative sun exposure
  - Sun sensitivity
  - Place of birth, latitude of residence
  - Occupational exposure, hobbies, social/economic status

# ACTINIC KERATOSES –Ctd.

- AK are the strongest predictor of developing BCC/SCC
- The 3rd most common reason for patients to see a dermatologist
- Prone phenotype: fair skin, tendency to freckle, blue eyes, red/blond hair, tendency to sunburn, poor ability to tan in the sun
- Clinical presentation :
  - localized keratosis
  - localized erythema
  - scaling macule
  - superficial ulceration
  - papule/ nodule

# AK– Clinical types

- Macular AK
- Papular AK
- Hypertrophic AK
- Pigmented AK
- Cutaneous horn
- Actinic cheillitis
- Multiple AK
- Proliferative AK ( immediate potential for invasion)

# DIAGNOSIS—AK

- Shave biopsy/ Curette Bx. / Punch Bx.
- Histology : AK are premalignant growths confined to the lower 2/3 of the epidermis
- Do not possess malignant potential
- Risk of developing SCC is low (1%)
- It is impossible to predict which AK will persist, regress, transform into SCC
- Differentiate AK from SCC by size, thickness, ulceration, bleeding, Bx.

# Treatment of AK

- Prevention
- Cryotherapy
- Top. Chemotherapy (5-FU)
- Curettage and electrodessication
- Chemical peels ( TCA)
- Photodynamic therapy (PDT)
- Laser ablation with CO2 or Erbium YAG
- Vermillionectomy

# BOWEN`S DISEASE

- Premalignant growth confined to the full thickness of the epidermis and adnexal structures (hair follicles and sweat glands)
- Asymptomatic , solitary plaque on sun-exposed areas
- Slowly enlarging erythematous plaque with irregular outline and scaly surface (resembles Psoriasis or Eczema)
- BD developed on the glans of penis –Erythroplasia of Queyrat
- Erythroplakia (BD=SCC in situ on oral mucosa: men, tobacco,alcohol )
- Leukoplakia( white macule on oral mucosa: men, smokers, alcohol, chr. trauma / infections
- Treatment : same as AK (shave Bx. Cryotherapy, top.5FU, top. Imiquimod, laser ablation, PDT

# Basal cell carcinoma

- Most common cancer in humans (BCC:SCC = 5-7:1)
- 75% of all non-melanoma skin cancers
- Risk factors - same (UVB important)
- 80% SCC - head and neck; 15% SCC - shoulders, back, chest; rare - inguinocrural, genitalia, subungual
- Older people - frequently affected
- Reports in children - syndromes
- Slowly growing tumour
- Virtually never metastasises (0,05%)
- Clinical features
  - translucent, pearly telangiectatic edge
  - rodent ulcer
  - soft, cystic consistency nodule
  - firm plaque

# Basal cell carcinoma ctd

- Clinical variants
  - dome-shaped nodules
  - ulceration
  - pigmented
  - ill-defined, scaly patches with central atrophy (superficial BCC)
- Recurrences are common - nose, eye, ear; after previous radiotherapy; growth pattern NB
- Treatment
  - depends on site, size, age of patient
  - biopsy + cauterisation
  - curettage + cautery
  - surgical excision
  - Mohs' micrographic surgery
  - radiotherapy
  - topical treatment

# Squamous cell carcinoma

- Second most common skin cancer after BCC
- SCC accounts for 20% of all dermatological malignancies
- Increased incidence
  - Celtic descent, Australia, South Africa
  - in albinos, XP, renal transplant recipients
  - AIDS
  - after PUVA
- Caucasians; M:F = 3:1; older people
- On direct sun-exposed areas
- Potentially precancerous conditions for developing SCC: AK, Bowen's disease, leukoplakia
- Varying clinical presentations include: keratotic nodules, exophytic erythematous nodules, indurated plaque, ulcers with infiltrative edge
- Histologically also varies from well-differentiated to anaplastic

# Risk factors for metastases and recurrences

- Anatomical considerations
  - de novo SCC
  - size (>2cm in diameter)
  - site - scar; closer to mucosal orifice
- Previously treated SCC
- Histological parameters
  - deep invasion
  - poor differentiation
- Immune status
  - ↑ incidence, more aggressive behaviour in organ transplant recipients
- Importance of SCC - can metastasise to lymph nodes
- Treatment – biopsy followed by cauterisation
  - aggressive curettage and cautery
  - surgical excision with 3-4mm margins followed by radiotherapy
- Patient follow up at regular intervals (3-12/12); skin examination, oral mucosa + LNs