Benign and Malignant skin tumors

Prof. Hayder Al-Hamamy
Benign neoplasms and hyperplasia
Acquired melanocytic nevi:

- They are hamartomas (abnormal collection of normal tissue constituents).
- They are collection of nevomelanocytic cells.
- Very common, most adults have about 20 nevi.
- They start in childhood and increase in number into adulthood.
- Evolution: start as junctional change into compound then intradermal nevi.
Classification:

1. Junctional melanocytic nevi: arise at dermoepidermal junction, flat and uniformly pigmented.
2. Compound melanocytic nevi: nevus cells at dermoepidermal junction and at superficial dermis, elevated and of uniform color.
3. Dermal melanocytic nevus: represent the last stage of evolution, nevus cells only in the dermis, no nevus cells in the epidermis, elevated and usually colorless.
Group of naevus cells

Junctional

Compound

Intradermal
Junctional nevus
Compound nevus
Intradermal nevus
Melanocytic nevi never become malignant because of manipulation and trauma.

The risk of malignant transformation is very minute.

Management: There is no medical indication for removal of ordinary melanocytic nevi. They can be removed for cosmetic purposes.
Congenital melanocytic nevi:

- Start in utero, of 2 types; small and large (bathing trunk), usually deep in color with irregular border and covered by hair, with time the skin becomes course. They have a malignant potential, some of them esp. large ones may change into malignant melanomas.
Seborrheac keratosis:

- Benign epidermal tumors, very common, usually appear after the age of 30 years and increase in number with age.
- They have the appearance of being stuck on the skin, usually pigmented brown to yellow with a greasy surface, usually appear in covered areas but may appear on the face.
- management: can be removed for cosmetic reasons.
Epidermoid cyst:

- derived from the epithelium of the hair follicle, formed closure of the orifice of the follicle, cystic changes of its epithelium and converted into a dermal cyst filled with keratin and lipid rich debris usually with an orifice on the skin surface.
- common in young adults and middle aged on the face, neck and upper trunk.
- Management: Surgical removal, because they may get infected. Remove the cyst wall to prevent recurrence.
Trichilemmal (Pilar) cyst:

- similar to epidermoid cyst but more firm, appear on the scalp, sometimes multiple.
- management: surgical removal.
Precancerous conditions
Solar (actinic keratosis)

- **Etiology:** related to multiple sun exposure, caused by ultraviolet light effects.
- **Clinical features:** single or multiple discrete, dry rough lesion better felt than seen, sometimes erythematous with adherent scale usually painful when the scale is removed.
- **Location:** usually on the face or bald scalp, dorsum of the hand.
- **It may change into squamous cell carcinoma (SCC).**
Management:

- Prevention: Sun avoidance.
- Topical therapy: 5-flurouracil oint., imiquimod oint.,
- Cryotherapy: physical destruction with liquid nitrogen
- Surgical removal esp if SCC is suspected.
Solar keratosis
Solar keratosis
Solar keratosis
Solar keratosis
Malignant skin tumors
Basal cell carcinoma (BBC)

- Is the most common cancer in humans.
- Etiology: UV radiation exposure induces mutations in tumor suppressor genes.
- prior X-ray exposure.
- It is locally invasive and destructive, slowly growing. It has the tendency to recur after removal but no tendency to metastasize.
- Clinical features:
  - It usually affects elderly, more in fair skinned.
  - distribution: usually on the face.
Clinical types:

1- Nodular BCC: a papule or nodule, translucent or pearly skin-colored or red, smooth surface with telangiectasia.

2- Ulcerating BCC (rodent ulcer): an ulcer covered with a crust with a rolled border.

3- Sclerosing (cicatricial) BCC: small patch of sclerosed skin (scar-like) with ill-defined border, skin colored or whitish.
5- Superficial multicentric: thin plaque, pink to red and has a characteristic thread-like border with fine scales.

6- Pigmented BCC: brown to blue to black color, smooth glistening surface may be confused with malignant melanoma.

7- Cystic BCC: cystic changes may occur and the lesion will have a depressed center.
BCC
Histopathology

- a mass of proliferating atypical cells, large and oval deep blue on H&E stain that resemble the basal cells of the epidermis. The peripheral cells of the lesion are arranged in a row like a fence (palisading appearance).
Treatment:

- According to type, location, age and general health of the patient.
  1. Surgical excision: with a safe margin of 0.5 cm surrounding normal skin.
  2. Moh's micrographic surgery: This is a staged excision with histological checking of the margins for malignant cells at the time of the operation.
- It is indicated for cicatrical BCC and for BCC at cosmetically important areas such as the eyelids where tissues must be preserved and in certain anatomical locations such as the nose.
1. Curretage and cautery: simple and effective, suitable for small lesions.

2. Cryotherapy: freezing with liquid Nitrogen simple and effective, suitable for small lesions.

3. Radiotherapy: rarely used, indicated for very ill patients when other modes of treatment cannot be used.

- BCC responds well to all the mentioned treatments with an overall cure rate of more than 95%.
THANK YOU