Skin tumors

The most important skin tumors

**Benign** tumors of **epidermis**
- Melanocytes : acquired melanocytic nevus
- Epidermal cell : seborrheic keratosis, skin tags , ± keratoacanthoma.

**Premalignant** tumors of epidermis
- Actinic keratosis, arsenic keratosis,,,

**Malignant** tumors of epidermis
- Basal Cell Carcinoma.
- Squamous Cell Carcinoma.
- Malignant melanoma.
- Paget’s Disease of the Breast.

**Benign** tumors of **dermis**
- Stromal tumor as dermatofibroma
- Vascular as pyogenic granuloma

**Malignant** tumors of **dermis**
- Kaposi Sarcoma
- Lymphoma
- Dermatofibrosarcoma protuberans.
- Cutaneous Metastasis.

Benign skin tumour

**Acquired melanocytic nevocellular nevus(moles)**
Melanocytic nevocellular nevi are small usually (<1.0 cm), circumscribed, acquired pigmented macules or papules composed of groups of melanocytic cells located in the epidermis, dermis, and rarely, subcutaneous tissue. The less common in blacks or pigmented peoples, average No. in western countries 15 moles per person, while in Iraqi persons 6 moles per person.

**Duration of Lesions** These lesions, which are commonly called moles, appear in early childhood and reach a maximum in young adulthood. There is a gradual involution of lesions, and most disappear by age 60-80.

**Histological classification**
can be classified according to the site of the clusters of nevus cells,
*Junctional Melanocytic nevus* Cells at the dermal-epidermal junction above the basement membrane.

*Compound Melanocytic nevus* A combination of the histologic features of the junctional and dermal.

*Dermal Melanocytic nevus* Cells exclusively in the dermis.

**Junctional Melanocytic**
- Macule, or only very slightly raised
- Color; uniform tan, brown, or dark brown
- Shape; round or oval with smooth, regular borders
- Arrangement; scattered discrete lesions

**Compound Melanocytic**
- Type; papules or nodules
- Color; dark brown, sometimes even black; color may become mottled as progressive conversion into dermal type.
- Shape; round, dome-shaped, smooth, occasionally papillomatous or hyperkeratotic.

**Dermal Melanocytic**
- Type; papule or Nodule
- Color; skin-colored, tan, brown, or flecks of brown, often with telangiectasia
- Shape; round, dome-shaped

**Management of Melanocytic NCN**
Indications for removal of acquired melanocytic NCN are
1. Site—lesions on the scalp, soles, all mucous membranes, anogenital area
2. Color—if color is or becomes variegated
3. Border—if irregular borders are present or develop
4. Symptoms—if lesion begins to persistently itch, hurt, or bleed
5. If criteria for malignancy are detected by dermatoscopy.

**Seborrheic keratosis**
The seborrheic keratosis is perhaps the most common of the benign epithelial tumors. Genetic factor have a role, sun exposures, internal diseases. Rarely before 30 years of age.

The lesion starts as a *macule*, a skin-colored or light tan lesion, and in the course of time becomes more pigmented; at this time the lesion has a “stuck on” appearance in the form of a *plaque*; further on in their course, the surface appears “warty,” the lesion usually asymptomatic, Rarely pruritic; tender if secondarily infected. Most commonly site Face, trunk, upper extremities

Leser–Trélat sign: Sudden appearance of multiple small usually pruritic seborrheic keratoses, and in this case we should excluded the possibility of an underlying malignancy such as abdominal adenocarcinoma, leukemia or mycosis fungoides.

**Management**
- *Curettage*, electrocauterations, chemical cauterizations, cryotherapy, ,
**Skin Tags (Achrochordon)**

Skin tags are common tumors found in approximately 25% of males and females. The most frequent affected area is the axilla, followed by the neck and inguinal region. They begin as a tiny, brown or skin-colored, oval excrescence attached by a short, broad-to-narrow stalk. With time, the tumor can increase to 1 cm as the stalk becomes long and narrow.

**Treatment:** The stalks are easily removed by scissor excision or with a light touch of the electrocautery. Local anesthesia is usually not necessary.

**Dermatofibroma**

Is a common reactive fibrous proliferation. Two most common triggers appear to be arthropod assault and folliculitis.

**Clinical features:** 5–10mm firm tumor; commonly on legs. Color varies from skin-colored through tan to red-brown or even dark brown. When one compresses a dermatofibroma from the sides, the lesion becomes depressed, rather than protruding as would a melanocytic nevus (dimple sign or Fitzpatrick sign)

**Treatment:** Lesions should be removed by excision under local anesthesia.

**Pyogenic granuloma**

Is a benign vascular skin tumor common in children and pregnant women. The term is pyogenic granuloma a misnomer. It is caused by vascular proliferation and appears as a red sessile or pedunculated mass of the skin or mucous membranes. The important differential diagnosis is from an amelanotic melanoma and, for this reason; the histology should always be checked.

**Treatment:** Lesions should be removed by curettage under local anesthesia with cautery to the base. Recurrence is possible.

**Hemangioma (Capillary hemangioma)**

Is a benign vascular tumor, which typically appears at birth or just thereafter.

**Clinical features:**
Raised red to purple soft nodules that can become very large. About 30% can be seen at birth, but most appear later and all continue to grow. Tumors can be compressed, but do not disappear with diascopy. During the first months of life, hemangiomas can continue to grow (proliferation phase). After about year of age, no further growth is anticipated and regression starts (Involution). It may take many years and often leaves behind scar or loose skin.

**Prognosis**
30% of the patients will subside in the 3rd year. 50% in the 5th year, 70% in the 7th year, 90% in the 9th year.

**Complications include:**
- Obstruction of vital structures: eyes, nose, mouth.
- Bleeding: Serious events surprisingly rare.
- Ulceration.
Management:
Nonintervention.
Lesions that are relatively small and indolent should remain untouched if they are to involute spontaneously. In most cases, the result is very satisfactory.

Treating ulcers and rapidly proliferating lesions.
Ulcerations are painful, may become infected, and heal with scarring. Ulceration is managed with local wound care, topical and systemic antibiotics, systemic and intralesional corticosteroids, flashlamp pulsed-dye laser, interferon alfa-2a, topical imiquimod.

Surgery.
Most hemangiomas are managed medically. But large one, failure of medical treatment, even small hemangiomas but near nose or eye, mouth, and in complicated type.

Keratoacanthoma

Keratoacanthoma (KA) is a special lesion, occurring as an isolated (usually) nodule(s), usually on the face. It presents as a dome-shaped nodule with a central keratinous crater that mimics squamous cell carcinoma. Unique features are its rapid growth rate, much faster than a squamous cell carcinoma, and also its spontaneous remission over a period of several months. Still, in every solitary KA, tissue must be obtained for histopathological study to rule out squamous cell carcinoma. Onset usually over 50 years; rare below 20 years, male to female 2 : 1

Clinically as rapid growth(nodule, dome-shaped often with a central keratotic plug), achieving a size of 2.5 cm within a few weeks. Lesion has Skin-colored or slightly red, tan/brown.

Management
Typically biopsy needed from lesion because KA difficult to differentiated from SSC.
Surgical electrocauterations, cryotherapy, curettage and electrocauterations, excision of lesion.
Intralesional injection as MTX, bleomycin, interferon,
Systemic retinoid, MTX,,
Radiotherapy

Lipomas

Lipomas are common benign tumours of mature fat cells in the subcutaneous tissue. There may be one or many and lipomas are rarely a familial trait. They are most common on the proximal parts of the limbs but can occur at any site. They have an irregular lobular shape and a characteristic soft rubbery consistency. freely movable round or oval subcutaneous mass. They are rarely painful. They need to be removed only if there is doubt about the diagnosis or if they are painful or unsightly.

Treatment: Excision
**Epidermoid and pilar cysts**

Often incorrectly called ‘sebaceous cysts’, these are common and can occur on the scalp, face, behind the ears and on the trunk. They are skin colour cystic lesions attached to skin not free movable often have a central punctum; when they rupture, or are squeezed, foul smelling cheesy material comes out.

**Histologically**, the lining of a cyst resembles normal epidermis (an epidermoid cyst) or the outer root sheath of the hair follicle (a pilar cyst).

**Treatment** is by excision or incision followed by expression of the contents and removal of the cyst wall.

**Hypertrophic and keloid scar**

Excessive connective tissue proliferation following an injury; hypertrophic scar remains confined to the boundaries of the original insult, while a keloid proliferates beyond these limits.

**Predisposing factors include:**

*Ethnic factors:* Far more common in blacks.

*Location:* Sternum, shoulders, neck (after thyroid operation), ear lobes (piercing), ankles, shins, over clavicle, edge of chin, and other sites where skin tension is generally increased.

*Type of injury:* Burns and infections more often form keloids, leading to contractures and impaired function, as well as considerable cosmetic defects.

**Clinical features:**

Firm skin-colored to red nodules and plaques rich in telangiectases. Keloids have irregular “fingers” growing at the periphery. Both may be tender, painful, or pruritic

**Therapy:**

Topical steroid with occlusion

Injection of corticosteroids,

Injections can be combined with cryotherapy

Pressure dressing Silicon gel sheeting for at least 12 hours daily useful for fresh wounds and especially burn scars as prophylactic measure

Debulking excision radiation therapy.

Excision and coverage with skin graft

**Sebaceous Hyperplasia**

*Senile Sebaceous Hyperplasia*, is especially common in persons with significant chronic sun exposure. The age of onset is usually past 40. The areas of predilection are the forehead, infra-orbital regions, and temples. The lesions are small, cream-colored or yellowish umbilicated papules 2 to 6 mm in diameter. Clinically, they may mimic an early basal cell carcinoma.
Premature sebaceous hyperplasia, also known as familial presenile sebaceous hyperplasia, presents with extensive sebaceous hyperplasia with onset at puberty and worsening with age.

Treatment is solely for cosmetic purposes and employs electrosurgery, laser treatment, shallow shave biopsy. Isotretinoin will reduce lesions.

Syringoma

Benign tumor that originate the eccrine dermal duct. More common in women, starting in puberty. Usually multiple skin-colored to yellow papules. Most common site is periorbital, although axillae, umbilicus, and genital region also seen. Eruptive syringomas: Sudden onset of multiple papules usually on trunk; usually in young women.

Therapy: In most instances, best left alone; if cosmetically disturbing, a variety of destructive measures including laser ablation, dermabrasion or electrosurgery is possible. Recurrences is common.

Congenital melanocytic nevus

Is a melanocytic nevus present at birth.

Clinical Types
Lesions are subdivided by size.
Small: less than 1.5cm diameter.
Medium: 1.5–20cm diameter.
Large or giant: more than 20cm.

Most congenital melanocytic nevi are heavily pigmented, have a papillomatous surface and contain hairs.

Prognosis: There is a risk of developing malignant melanoma, varying with the type of congenital melanocytic nevus:
Large congenital melanocytic nevus with risk of malignant melanoma is around 10%.
Medium and small congenital melanocytic nevus: Risk is much lower, clearly less than 5%.

Therapy:
Two goals:
(1) Avoid malignant melanoma;
(2) cosmetic improvement, as patients with large disfiguring nevi have marked psychosocial problems.

Small and medium lesions can be excised, either in a single step or as part of a staged excision. If larger, skin expanders can be helpful to facilitate closure. Early dermabrasion or curettage removes much of the melanocyte load and improves cosmetic appearance. Laser therapy can helpful. Whether it reduces the risk of malignant melanoma remains controversial.