Skin tumors

Actinic Keratosis

Actinic keratosis (AK) (solar keratosis) is a squamous cell carcinoma insitu confined to the epidermis. The lesions are commonly sun-induced, and increase in number with age. Most lesions remain superficial. Lesions that extend more deeply to involve the papillary and/or reticular dermis are termed squamous cell carcinoma (SCC).

Risk factors included:
- Individuals with light complexions are more susceptible than those with dark complexions.
- Years of sun exposure are required to induce sufficient damage to cause lesions.
- Immunosuppression is a risk factor. HPV infection, and chemical substances.

Clinical features.
- The lesion started as area of slightly rough. Texture is the key to diagnosing early lesions. They are better recognized by palpation than by inspection. Very gradually an adherent, yellow, sharp scale forms. Removal of the scale may cause bleeding. Most lesions vary in size from 3 to 6 mm. The extent of disease varies from a single lesion to involvement of the entire forehead, balding scalp, or temples.
- Complicated cases will progress to SCC.

Management
- Avoid sun exposed and use sun screens
- Cryotherapy, chemical cuteraiztion.
- Surgical removal.
- Topical topical chemotherapy with 5-fluorouracil, topical immiquimod, diclofinac gel,

Basal Cell Carcinoma (Rodent Ulcer)

Basal cell carcinoma (BCC) is the most common malignant cutaneous neoplasm found in humans. The most common presenting complaint is a bleeding or ulcerated sore that heals and recurs. BCC advances by direct extension and destroys normal tissue. Left untreated or inadequately treated, the cancer can destroy the whole side of the face or penetrate subcutaneous tissue into the bone and brain. Up to 80% of BCCs occur on the head and neck. About 15% occur on the shoulders, back, or chest. Men have a significantly higher incidence than women.

Risk Factor

Physical characteristics
- Blond or red hair
- Blue or green eyes
- Light skin color

Exposures
- Arsenic
- Coal tar
Clinical Type of basal Cell Carcinoma

- **Nodular BCC** (the most common variant) is characterized by skin-colored, dome-shaped papules with telangiectasias and a pearly border. The lesions may be crusted or ulcerated, and they may be associated with intermittent bleeding.
- **Pigmented BCC**.
- **Superficial BCC**.
- **Morpheaform** (sclerosing or infiltrating).

**Management**: There are several factors to consider before choosing the best treatment modality. The most important are clinical presentation, cell type, tumor size, and location. Biopsy must be done before initiating the treatment.

**Surgical**:

- Curettage (usually with electrodesiccation).
- Excision surgery.
- Cryosurgery.
- Mohs’ micrographic surgery.

**Radiation**.

**Topical Therapy**:

- Imiquimod 5% cream.
- 5- Fluorouracil.

**Intralesional therapy**

- Interferone-Alfa.
- Photodynamic therapy (PDT).
- Intralesional Zinc sulphate 2%. (Iraqi study)

**Squamous Cell Carcinoma**
It is a malignant tumor of epithelial keratinocytes (skin and mucous membrane) etiology and risk factors.

UVB radiation is important for the induction of SCC. Risk factors include exposure to sunlight during childhood, sunburns, ionizing radiation, light skin, blue eyes, blonde or red hair, outdoor occupations, freckling, or facial telangiectasia, and psoriasis treatment with oral psoralen and ultraviolet A radiation (PUVA). Arsenic, used in medications in the past, and in drinking water produces tumors and carcinoma in situ.

Human papillomavirus types 6 and 11 are found in tumors of the genitalia and type 16 in periungual tumors. Immunosuppression leads to a great increase in the risk of SCC. Renal-transplant recipients have a 253-fold increase in the risk of SCC.

Clinically as Usually isolated but may be multiple. keratotic and/or ulcerated lesions, indurated lesion most commonly in sun-exposed areas. SCCs are common on the scalp, backs of the hands, and the superior surface of the pinna; BCC is rarely found on these sites.

**History:** Slowly evolving tumor. "Any isolated keratotic or eroded papule or plaque in a suspect Patient that persists for over a month is considered a carcinoma until proved otherwise".

**Management:** After the diagnosis has been confirmed by biopsy,

The tumor should be excised with a 0.5–cm border of normal skin. Mohs micrographic surgery is useful for high risk tumors. Radiotherapy is effective in frail and the elderly. Carcinoma in situ: cryotherapy, or 5-fluorouracil topically.

**Malignant Melanoma**

One of the most dangerous tumors, malignant melanoma arises from cells of the melanocytic system. Melanoma has the ability to metastasize to any organ, including the brain and heart. Therefore, it is imperative that all physicians be familiar with the features of early preinvasive melanoma and includes a complete skin examination as part of routine physical examinations.

With early detection and local surgery it may be cured in over 92 percent of cases. So what do we look for? It is as simple as ABCDE.

A = asymmetry;
B = border irregularity;
C = color variability;
D = diameter greater than 0.6 cm.
E = elevation irregularity

**Etiology**

Sun exposure, genetic factor, PUVA,.

**Types**

Lentigo maligna (melanoma in situ)
Superficial spreading melanoma
Acral lentigenous melanoma
Nodular melanoma
Treatment with surgical excision after assessment grading of disease.

Kaposi sarcoma
(KS) is a multisystem vascular neoplasia characterized by mucocutaneous violaceous lesions and edema as well as involvement of nearly any organ. Many individuals with KS are in some degree immunocompromised, especially those with HIV disease.

Etiopathogenesis
Type 8 (HHV-8), has been identified in tissue samples of several variants of KS.

Clinical Variants of KS
1-Classic Kaposi sarcoma
2-African Cutaneous KS (endemic)
3-African lymphoadenopathic (endemic)
4-AIDS related KS (epidemic)
5-Kaposi’s sarcoma associated with immunosuppressive states.

Clinical features
Kaposi sarcoma may develop at any time during the course of HIV infection. Generally, the greater the immunosuppression (e.g. with CD4 cell counts less than 200/mm3) the more extensive the Kaposi sarcoma will be.

Kaposi sarcoma presents as red to purplish spots (macules) and raised bumps (papules and nodules). They are generally first seen on the skin, commonly on legs or feet. They also occur in the mouth. Initially, the lesions are small and painless but they can ulcerate and become painful. Their visible presence may cause considerable anxiety. Kaposi sarcoma lesions can also occur internally; in the gut, lungs, genitals and lymphatic system. These internal lesions may cause symptoms e.g. discomfort with swallowing, bleeding, shortness of breath, swollen legs, etc.

The appearance of Kaposi sarcoma lesions is often typical but a skin biopsy of a lesion allows a definite diagnosis.

Management:
Treatment underlying conditions
Local Treatment with cryotherapy, electrocuterization, radiotherapy, surgical excision
Interalsional treatment with interferon, bleomycin, vincriitin,
Sstemic treatment with interferon, retinoid,

Cutaneous T-Cell Lymphoma
The term cutaneous T-cell lymphoma (CTCL) encompasses a group of distinct lymphomatous neoplasms of helper T cells that present in the skin but later may involve lymph nodes, peripheral blood cells, and the viscera. Mycosis fungoides, Sézary syndrome, and lymphoma cutis are all examples of CTCL. The malignant cells have a marked affinity for the skin, particularly the epidermis, often leading to formation of Pautrier’s intraepidermal abscesses.

Mycosis fungoides
The name *mycosis fungoides* is misleading because the disease is not fungal in origin. MF is a rare T-cell lymphoma that appears to originate in the skin. MF is twice as common in men as in women. Most cases are diagnosed in the fifth and sixth decades.

The course is unpredictable, sometimes lasting less than 1 year or lingering for decades. There are **three phases in the evolution** of the disease:

- **Patch stage**: Macules and patches, slightly erythematous and scaly (eczematous like lesions). Predilection sites include buttocks, trunk, upper thighs, upper arms.

- **Plaque stage**: Gradual thickening of patches with increased scale (psoriatic like lesions)

- **Tumor stage**: Usually after many years, abrupt development of thick, often ulcerated tumors arising from the plaques or even from normal skin.

Some patients have only plaques and tumors. Other patients may have all stages in the same time. Lymphadenopathy may develop at any stage. Survival time is less than *3* years once the **tumor phase** begins.

Despite the new laboratory diagnostic methods, recognition of the physical signs of the disease by the clinician is still the most sensitive method of detection.

**Treatment**
Topical with steroid, nitrogen mustard, PUVA, retinoid radiotherapy
Systemic with MTX, retinoid,