

Chapter 5.2

Skin Cancer



Skin Cancer

- Most common cause is ultraviolet rays of the sun
 - most often on the head and neck
 - most common in fair-skinned people and the elderly
 - one of the most common type of cancer
 - one of the easiest to treat
 - has one of the highest survival rates if detected and treated early

Skin Cancer

- **Three types** of skin cancer /// named for the epidermal cells in which they originate
 - basal cell carcinom
 - squamous cell carcinoma
 - malignant melanoma

Basal Cell Carcinoma



(a) Basal cell carcinoma

- most common type
- least dangerous because it seldom metastasizes
- forms from cells in stratum basale
- lesion is small shiny bump with central depression and beaded edges

Squamous Cell Carcinoma



(b) Squamous cell carcinoma

- arise from keratinocytes from stratum spinosum
- lesions usually appear on scalp, ears, lower lip, or back of the hand
- have raised, reddened, scaly appearance later forming a concave ulcer
- chance of recovery good with early detection and surgical removal
- tends to metastasize to lymph nodes and may become lethal

Malignant Melanoma



(c) Malignant melanoma

- skin cancer that arises from melanocytes
- often in a preexisting mole
- less than 5% of skin cancers, but most deadly form
- treated surgically if caught early
- metastasizes rapidly - unresponsive to chemotherapy - usually fatal

Malignant Melanoma



(c) Malignant melanoma

- person with **metastatic melanoma** lives only 6 months from diagnosis
- 5% - 14% survive 5 years
- greatest risk factor – familial history of malignant melanoma
- high incidence in men, redheads, people who experience severe sunburn in childhood

UVA, UVB and Sunscreens

- UVA and UVB are **improperly called “tanning rays” and “burning rays”**
- **both thought to initiate skin cancer**
- sunscreens protect you from sunburn but unsure if sunscreens provide protection against cancer
 - *Note: A different danger are chemicals in sunscreen - damage DNA and generate harmful free radicals*