# Skin Cancer

#### Functions Of The Skin

The skin is the largest organ of the body.

Through specialized structures such as nerves, hair, nails and glands, the skin performs several essential functions. It protects the structures underneath from injury, regulates body temperature, excretes waste substances and prevents the loss of too much water and other needed compounds.

The skin also serves as a sense organ for touch, pressure, heat, cold and pain.

#### **Precancerous Skin Conditions**

Middle aged individuals, particularly those with lighter skin, may develop flat, scaly patches known **as solar keratoses**. They are caused by overexposure to the sun.

They may be pink, yellow or brown and usually appear on the head, shoulders, and shins. Solar keratoses are slow growing and do not usually produce any symptoms other than the visible skin patch, itch and tenderness. Although they may not be very noticeable or troubling, they can turn into squamous cell cancers if not removed.

Additionally, there are other skin conditions which can become cancerous making regular examination of the skin by a physician essential.

### Skin Cancer Incidence

Over 600,000 cases of skin cancer occurring annually, a vast majority of the cases are highly curable basal cell or squamous cell cancers.

These are most common among individuals with lightly pigmented skin who live at latitudes near the equator.

The most serious skin cancer is melanoma, which will be diagnosed in about 32,000 people in 1991.

The incidence of melanoma is increasing at a rate of 4% per year. 8,500 deaths this year alone, will be caused by skin cancer: 6,500 from malignant melanoma, 2,000 due to other skin cancers.

Warning signals - unusual skin condition, change in size or color of a mole or other darkly pigmented growth or spot, scaliness, oozing, bleeding or change in the appearance of a bump or nodule, the spread of pigmentation beyond its border, a change in sensation, itchiness, tenderness or pain.

#### Skin Cancer Risk Factors

- Over exposure to the ultraviolet rays of the sun is the principal cause of skin cancer.
- Fair skinned people, notably redheads and blondes, are the most likely to get skin cancer because they lack sufficient

- quantities of melanin, the pigment that helps prevent burning.
- The darker the skin, the more melanin is present. Blacks, who have the greatest amount of melanin, are the least likely to develop skin cancer.
- Skin cancer rarely occurs in childhood and the average age for discovery of a first skin cancer is fifty.
- People who work outdoors, play a lot of outdoor sports or lie on the beach are at high risk of developing skin cancers.
- Swimmers should remember that the sun's rays can reach down three feet into the water and, whenever possible, everyone should try to avoid direct sun at midday, from ten a.m. to three p.m., when the sun's rays are the strongest.

# Early Detection Of Skin Cancer

Early detection is critical. Adults should practice skin self examination once a month and suspicious lesions should be evaluated promptly by a physician.

Basal and squamous cell skin cancers often take the form of a pale, wax-like, pearly nodule or red, scaly, sharply outlined patch.

Melanomas often start as small mole-like growths that increase in size, change color, become ulcerated and bleed easily from a slight injury.



# Skin Cancer

Here is the simple ABCD rule to help you to remember the important signs of melanoma

- **Asymmetry** one half does not match the other half.
- Border irregularity the edges are ragged, notched or blurred.
- Color the pigmentation is not uniform. Shades of tan, brown and black are present. Red, white and blue may add to the mottled appearance.
- Diameter greater than six millimeters.

### Treatment Of Skin Cancers

There are four methods of treatment:

- 1. Surgery
- 2. Radiation therapy.
- 3. Electrodesiccation (tissue destruction by heat).
- 4. Cryosurgery (tissue destruction by freezing).

For malignant melanoma, the primary growth must be adequately excised and it may be necessary to remove nearby lymph nodes.

## Survival

For basal cell or squamous cell cancers, cure is highly likely if detected and treated early.

Malignant melanoma can spread to other parts of the body quickly. However, when detected in the earliest stages and treated properly, it is highly curable.

