PATIENT TEACHING AID



Melanoma is the least common but most dangerous form of skin cancer. It begins in the skin cells, called melanocytes, found in the top layer of the skin. Melanocytes make melanin, the brown pigment that turns skin tan, brown, or black. Melanin protects the deeper layers of the skin from the sun's damaging ultraviolet rays.

Melanomas begin to grow on the skin's surface, and when they are discovered early, they are usually curable by surgical removal. Surface melanomas are often brown or black areas of skin with certain features that can be recalled by the ABCDE rules:

Asymmetry: One side is shaped differently from the other side.

Border: Melanomas often have irregular or unclear borders.

Color: The color may vary from black, brown, or tan to reddish, blue, or even white. Often,

it is not the same color throughout.

Diameter: Most melanomas are the size of a pencil eraser or larger when diagnosed.

Evolving: A melanoma is usually first spotted when it looks like a mole that is changing in shape,

color, or size.

Once a melanoma grows deeper into the skin's layers, the cancer cells can reach the lymph or bloodstream and metastasize. A melanoma is very difficult to treat if it has spread beyond local lymph nodes; often, it is fatal. Treatment of a melanoma that has spread beyond the skin usually involves surgical removal of the tumor followed by chemotherapy, immunotherapy, and/or radiation.

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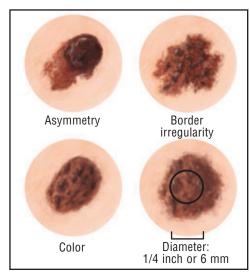
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PATIENT TEACHING AID

This Serious Form of Skin Cancer Is Curable When Detected Early

Skin cancer is the most common type of cancer. Most skin cancers are basal- or squamous-cell cancers, which are more easily treated and cured. The least common form of skin cancer is *melanoma*, which is diagnosed in about 60,000 people in the United States each year. Melanoma is the deadliest type of skin cancer when not diagnosed and treated early. The chance of developing melanoma during a lifetime is 1 in 50 for white people, 1 in 200 for Hispanic people, and 1 in 1,000 for black people. This risk is likely related to the amount



The skin should be self-examined regularly for new growths or suspicious changes in existing growths. A dermatologist should evaluate any questionable areas without delay.

of sun protection in a person's skin. Fair-skinned people are at greatest risk for melanoma because they have the least amount of melanin in their skin to protect them from the sun's ultraviolet (UV) rays; dark-skinned people have the lowest risk.

Risk Factors

It is not certain what causes melanoma, but some risk factors for developing it have been identified. People with several of these factors have a higher risk of melanoma than the general population. Most likely to develop melanoma are fair-skinned people who have been exposed to excessive UV radiation, such as from the sun or tanning booths. Melanoma is more likely in people who have had multiple sunburns, especially during childhood. Other risk factors include a large number of moles (50 or more), a mole that looks unusual in some way, a family or personal history of melanoma, and a suppressed immune system. People at increased risk for developing melanoma should have regular examinations by a dermatologist to enable early diagnosis and successful treatment of this condition.

Diagnosis

Melanoma is most likely to be found on the torso in men and on the lower leg in women, but it can develop elsewhere on the body, including the face, the eye, and the mucous membranes of the mouth or the genitals. During a physical examination, the dermatologist may choose to use a light and a magnifying lens to study a suspicious area more closely. If appropriate, the dermatologist may perform a skin biopsy, which involves removing a small sample of skin tissue. The tissue sample is sent to a pathologist for closer examination under a microscope. If the sample proves to be cancerous, biopsies of the lymph nodes near the melanoma will indicate whether the cancer has spread beyond the surface skin. Treatment is decided based on the results of these biopsies, as well as further tests that may be necessary to determine cancer spread.

Prevention

One way to prevent melanoma is to avoid UV light, including sun and tanning-booth exposure. Properly applied sunscreen and protective clothing while outdoors should become habits for everyone. Self-examination of the skin for suspicious-looking growths should be performed monthly. When a change in a mole is detected, a dermatologist should examine the area immediately. With early detection, melanoma is curable; once it has spread beyond the skin's surface, it can be fatal.

