

Organ Transplant Recipients and Skin Cancer

Who is at risk for skin cancer?

You are at increased risk for developing skin cancer if you:

- have fair skin; blue, green or hazel eyes, red or blond hair, and/or extensive freckling
- have been exposed to excessive amounts of natural sunlight (i.e., construction workers, farmers, outdoor sportsman, sunbathers) and artificial sunlight (i.e., tanning beds, sun lamps)
- work with coal tar, arsenic compounds, creosote, pitch or paraffin oil
- have traumatized skin sites such as major scars or burn areas
- have been exposed to excessive amounts of radium or x-rays
- live in sunny climates and/or mountainous areas
- have a family or personal history of skin cancer
- are an organ transplant recipient with a suppressed immune system
- you have a suppressed immune system due to other conditions or medications

Why are organ transplant recipients at greater risk for skin cancer?

All transplant patients, regardless of the risk factors listed above, are more susceptible to skin cancer than non-transplant patients. This increased risk is a result of the recipient taking immunosuppressive medications for the survival of his or her transplanted organ. These medications not only suppress the body's immune system, they also increase the risk of skin cancer as well as other growths and infections. The longer a person takes immunosuppressive medication, the greater the risk of developing skin cancer.

Do all organ transplant recipients develop skin cancer?

The majority of organ transplant recipients eventually develop skin cancer. It may take 3-7 years before a transplant recipient develops skin cancer; however, the length of time it takes to develop skin cancer will depend on an individual's risk factors. Some organ transplant patients (heart, lung, kidney) have higher risk of skin cancer than other transplants which is related to the higher level of immunosuppression that is needed to maintain these organs.



Most organ transplant recipients develop a limited number of skin cancers, which are easily treated if detected and diagnosed early. However, among transplant recipients there is a smaller, high-risk group that may develop more than 100 skin cancers per year, spreading to the lymph nodes and other parts of the body.

What does skin cancer look like?

Skin cancer is the most common type of skin cancer in the United States. More than 1 million cases are diagnosed each year. Learning the characteristics of the most common types of skin cancer (basal cell, squamous cell, and malignant melanoma) is essential to staying healthy. Early detection and diagnosis is key.

Actinic Keratosis

Actinic keratosis is a precancerous condition that has the potential for developing into squamous cell carcinoma. It appears as rough, red or brown, scaly patches on the skin. They are often more easily felt than seen. Like skin cancer, it is usually found on sun-exposed areas of the body, but it can be found on other parts of the body as well.

Basal Cell Carcinoma

Basal cell carcinoma appears as a small, pink bump or patch on the head or neck, although it may be found on any part of the body. If untreated, it will ulcerate, bleed, or crust over. Basal cell cancer is slow growing and does not usually spread to other parts of the body. However, if left untreated, it can spread to nearby areas and invade bone and other tissues under the skin. A person who develops basal cell cancer is at risk of developing the cancer again, in the same place, or developing a new basal cell cancer somewhere else.

Squamous Cell Carcinoma

Squamous cell carcinoma can look like basal cell cancers, but it is usually more scaly and rough, and it tends to stick out from the surface of the skin. This type of cancer is often found on the head and neck, but it has a tendency to grow on the ears, lips, and the backs of arms and hands. It can also develop in other skin areas like scars or ulcers. Squamous cell carcinoma is more aggressive than basal cell carcinoma and is also more likely to grow deep below the skin and spread to distant parts of the body. If treated early, however, this type of cancer is easily curable. Squamous cell carcinoma is the most common skin cancer in organ transplant recipients.



Malignant Melanoma

Malignant melanoma is less common than basal or squamous cell carcinoma, but it is more dangerous. It usually appears as an irregular brown, black and/or red spot or changing mole. Among white men, melanoma appears most frequently on the trunk; among white women, on the lower leg. Among blacks, although melanoma is rare, it appears most frequently on the palms, the soles of the feet, and the skin under nails. If caught early, melanoma is curable. However, if it spreads to other parts of the body, it can result in death.

If I am an organ transplant recipient, how can I stay healthy?

After an organ transplant, the following protective measures are recommended for maintaining healthy skin.

Sun Protection

- Avoid the sun when the sun's rays are the strongest, between 10 a.m. and 3 p.m.
- Wear protective clothing when out in the sun such as wide-brimmed hats, long-sleeved shirt and pants, sunglasses).
- Use sunscreen with a Sun Protection Factor (SPF) of 15 or higher and one that protects against UVA and UVB rays. Apply a sunscreen as part of your daily routine. Do so generously for maximum protection, especially on body parts easily overlooked (i.e., lips, tops of ears, head, back of neck and hands, and feet). Re-apply sunscreen every 2 hours when outdoors, especially if you are swimming or sweating. For more information, refer to your copy of "Sunscreens."
- Avoid exposure to artificial sun sources such as tanning salons or sun lamps.

Skin Examinations

- Do a complete skin exam every month in front of a mirror. For those hard to reach places, use a hand mirror to see (i.e., back of the scalp, neck, buttocks, and legs). Look for any new growths or changes including pink patches or spots, scaly growths, bleeding areas, or changing moles.
- Get a full-skin examination by your doctor every year. Your transplant physician should do so during your annual exam. A dermatologist, a doctor who specializes in the diagnosis and treatment of skin diseases, can perform this exam as well.
- If you have ALREADY had skin cancers;
 - Be sure to feel both sides of your neck, armpits, and groin crease for any new lumps or bumps which may be enlarged lymph nodes.
 - It is critical that you be examined more frequently than once a year. Dermatologists and Dermatologic Surgeons who are skin cancer specialists can often diagnose and treat many skin cancers early on. Ask your physician how often you should have these skin examinations.



Preventive Medications

A variety of creams and skin treatments are available, to the organ transplant recipient, to help reverse precancerous lesions or lessen the risk of developing skin cancer. Talk with your doctor about these treatments.

Early Diagnosis and Treatment

Early diagnosis and treatment is key to the success of maintaining healthy skin. If you notice any new skin growths or changes, contact your dermatologist or a member of your transplant team **immediately** for further examination.

