Features a shareable checklist for Skin Cancer Prevention

SKIN CANCER

WHAT YOU NEED TO KNOW

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SKIN CANCER

PREVENTION, SCREENING, AND TREATMENT OPTIONS

QUESTION
When was the last time you got checked for skin cancer?

Skin cancer is a common concern for adults that should be checked for regularly.

According to the World Health Organization, skin cancer consistently ranks among the top ten most common types of cancer in the world. The American Cancer Society, American Academy of Dermatology, and other professional organizations even estimate that skin cancer is the most common type of cancer, with more than 5 million cases diagnosed every year in the United States alone. Research shows 1 in 5 people will be diagnosed with some type of skin cancer in their lifetime. Skin cancer is highly prevalent, and it can be serious or even deadly sometimes.

Fortunately, skin cancer can often be prevented. It's also treatable, especially when detected and diagnosed early.

That's why it's essential to talk to your doctor if you're worried about skin cancer, or if you notice anything on your skin that concerns you. Getting checked out earlier improves your chances of a better outcome if you do have skin cancer. And while more research is needed, evidence also suggests that raising awareness about skin cancer—including its causes, risk factors, and warning signs—may help save lives.

What is Skin Cancer?

Let's start with the basics.

Cancer is a broad group of diseases that develop when DNA damage causes cells to abnormally mutate. These abnormal cells then multiply and spread, leading to the development of precancerous or cancerous tumors. Skin cancer typically develops when ultraviolet (UV) radiation from the sun triggers DNA damage in skin cells.Most skin cancers affect cells in the outermost layer of your skin, called the epidermis. The main types of skin cancer include:

- **Basal cell carcinoma**, which affects the basal cells that make new skin cells
- **Squamous cell carcinoma** of the skin, which affects the squamous cells that form the middle and outer layers of the skin
- **Melanoma**, which affects melanocytes, the cells that produce the pigment that gives your skin its color (melanin)

Other types of skin cancer include Merkel cell carcinoma, angiosarcoma, cutaneous B-cell lymphoma, cutaneous T-cell lymphoma, sebaceous carcinoma, and dermatofibrosarcoma protuberans (DFSP). You also may have heard of actinic keratosis, which is a type of precancer that forms on the skin.

Basal cell and squamous cell carcinomas are the most common. They also happen to be the most treatable and the least likely to be life-threatening. Melanoma is less common but is often considered a more serious type of skin cancer, since it's more likely to spread (metastasize) to other parts of the body.

Any area of your skin can develop cancer. The most common areas affected are typically the ones that get the most sun exposure, including the scalp, head, face, ears, neck, chest, arms, hands, and legs. But skin cancer can show up in other places, like beneath toenails or around genitals.

Skin Cancer Risk Factors and Causes

These six factors can help determine your risk of developing proststae cancer.

Skin cancer can affect anyone, but certain people have a higher skin cancer risk. This includes people who have one or more of the following risk factors:

- Lighter natural skin tone or color (although people with all skin colors can get skin cancer)
- Skin that easily burns, reddens, freckles, or becomes painful in the sun
- A history of excessive exposure to ultraviolet (UV) radiation, either from the sun or from an indoor tanning bed, booth, or sunlamp
- A history of sunburns
- Green or blue eyes
- Red or blonde hair
- Certain kinds of moles, or many moles
- A family history of skin cancer
- Older age

Additional risk factors include a weak immune system, a prior exposure to arsenic, and a history of radiation treatment. Recent research also indicates that human papilloma virus (HPV) infection may also increase the risk of certain types of skin cancer.

Despite these known risk factors, doctors and researchers don't know exactly why skin cancer happens in some people, and the underlying causes of cancer aren't fully understood.

Top Skin Cancer Signs and Symptoms

If you experience these signs and symptoms, contact your doctor.

Skin cancer can look different from person to person. However, there are a few of the skin cancer signs and symptoms to know, including:

- The appearance of a new mole or growth on your skin. The growth may look like a bump, scar, smooth shiny patch, dark spot, or rashy area, and it could be burning, itchy, or painful
- A bleeding, scaly, crusty, or scabby sore on your skin that doesn't heal

The American Academy of Dermatology created a simple mnemonic device to help you remember the warning signs of melanoma. Just remember the "ABCDEs" when looking at your moles or pigmented spots. If they match the ABCDEs, they could be melanoma.

- **Asymmetry**: one of half of the spot doesn't match the other half
- **Border**: the spot has an irregular or poorly defined border
- **Color**: the spot has different colors, including tan, brown, black, or even red, white, or blue
- **Diameter**: melanomas are usually larger than the size of a pencil eraser, although they can be smaller
- **Evolving**: the spot's size, shape, and/or color changes over time

If you notice any of the above skin cancer symptoms—especially a changing or new mole, or any spot that is bleeding, painful, crusty—call your doctor right away. If you have a personal or family history of skin cancer, or if you have known risk factors, your doctor may also advise you to get screened for skin cancer on a routine basis, even if you don't notice unusual signs or symptoms.

> *Finding it early, when it's small and has not spread, makes skin cancer much easier to treat.*
>
> *American Cancer Society*

Getting a Skin Cancer Diagnosis

Common types of tests used in diagnosing skin cancer.

Other conditions can present with symptoms that look like skin cancer. On the other hand, sometimes skin cancer symptoms are so subtle they're hard to detect on your own. The only way to know for sure whether you have skin cancer is to see your doctor. Your doctor may also refer you to a skin specialist, such as a dermatologist or oncologist, who may order additional tests.

Common tests, screening tools, and diagnostic techniques for skin cancer include:

- **Physical exam**, during which you can expect your doctor to check your skin and body for lumps, bumps, and other unusual areas, assess your overall health
- **Personal health history questionnaire**, where your doctor asks questions about your health habits, lifestyle, and family history of disease)
- **Skin biopsy**, where some or all of an abnormal-looking area on the skin is removed, then tested or viewed under a microscope by a qualified medical doctor. Common types of skin biopsies include shave biopsy, punch biopsy, incisional biopsy, and excisional biopsy

Depending on your situation, your doctor or medical team may recommend additional tests to identify additional signs of cancer or rule out other conditions, such as:

- Lymph node biopsy
- Chest X-ray
- CT scan
- Ultrasound
- Blood tests

Skin cancer is often diagnosed in stages that are used to describe how far the cancer has progressed which can help doctors make recommendations about treatment. In some instances, skin cancer may be diagnosedin stage 0, also known as “carcinoma in situ”. In this stage, abnormal cells in the skin are identified, but they haven't turned into invasive cancer yet. The stages of skin cancer are labeled with the Roman numerals I, II, III, and IV, with stage I being the earliest stage and stage IV being the most advanced stage. In stage IV, the cancer has usually spread to other areas of the body.

Skin Cancer Treatment Options

Treatment for skin cancer will depend on the type of skin cancer and the stage.

People with skin cancer often do much better when their cancer is detected, diagnosed, and treated early. If an early skin biopsy is able to completely remove the tumor and cancerous cells, this may even be enough to treat the cancer. If further treatment is needed, plenty of additional options exist. These include:

- **Cryosurgery**: the use of liquid nitrogen to freeze and destroy actinic keratosis or small early skin cancers
- **Excisional surgery**: surgical removal of cancer tissue and sometimes a small portion of the surrounding healthy skin
- **Mohs surgery**: a surgical procedure used to remove larger, recurring, or tough-to-treat skin cancers using a layer-by-layer approach to remove the abnormal tissue
- **Radiation therapy**: if a lesion is either incompletely excised or if surgery is in a cosmetically delicate area (or simply preferred to be avoided), radiation therapy is an attractive and effective alternative. This type of treatment uses powerful beams of energy to kill cancer cells and nearby damaged tissue, while preserving nearby healthy tissue. Our experienced team at SERO offers a wide range of advanced and innovative radiation therapy techniques that can help us deliver customized non-invasive surgical skin cancer treatments for our patients
- **Chemotherapy:** the use of medication to kill cancer cells. Chemotherapy medications may be applied topically (on the skin) or administered into the body (via the mouth or injected through a vein)
- **Photodynamic therapy**: the use of a specialized laser light to destroy cancer cellsBiological therapy: the use of your body's own immune system to kill cancer cells

These treatments may sound a little intimidating. In fact, many of them are relatively simple, and some can even be done in a quick office visit with your doctor.

Skin Cancer Prognosis

Getting a skin cancer diagnosis can be scary. But it may reassure you to know that the most common types of skin cancer are considered highly treatable and even curable when detected and treated early. According to the American Academy of Dermatology, even melanoma, which is considered the most serious type of skin cancer, has a five-year survival rate as high as 99 percent when it is detected and treated before spreading to other parts of the body.

When skin cancer deaths do occur, they are most likely to occur because of melanomas. About 20 Americans die of melanoma every day. Patients with darker skin color are more likely to be diagnosed with skin cancer once it has already reached its later stages and is more difficult to treat. This could be for many reasons, including the fact that people with darker skin color are more likely to develop certain types of skin cancer on atypical areas of the body such as the soles of the feet or inside the mouth. It also may be harder to see skin cancer signs and symptoms in people with darker skin.

People who are immunosuppressed, people who smoke, and people who have poor overall health may also be more likely to have a poorer prognosis after being diagnosed with skin cancer.

However, skin cancer is still considered highly treatable, and curable in the majority of cases. The key element is early diagnosis and treatment. Having a good ongoing relationship with your doctor who can get to know your goals and needs is a helpful step. But there are also things you can do at home to increase your chances of early detection and prevention.

Your Skin Cancer Prevention Checklist: What You Can Do ☑

Research suggests as many as 80 percent of skin cancer cases can be prevented. Maintaining a few healthy habits can have a long-term impact on the health of your skin! Here are some simple ways to reduce your skin cancer risk from Mayo Clinic:

- ☐ **Avoid excessive sunlight exposure**, especially during the hours of 10 a.m. and 4 p.m. Keep in mind that no amount of a tan is considered healthy for your skin.
- ☐ **Wear a high-quality and broad-spectrum sunscreen** every day and all year. Look for a sunscreen with at least 30 SPF and re-apply it every two hours (or more if you're swimming or sweating). Since UV radiation can penetrate cloud cover, doctors advise wearing sunscreen on overcast days, too.
- ☐ **Wear sun-safe clothing.** Sunscreen protects against some but not all types of UV radiation. To boost your skin's protection against the sun, put on a hat and wear clothing that covers your arms and legs.
- ☐ **Wear sunglasses.** Sunglasses protect your eyes and the delicate skin surrounding your eyes. Just be sure to get sunglasses that offer protection from the two types of UV radiation, UVA and UVB.
- ☐ **Skip the tanning bed.** Tanning beds have been shown to increase exposure to harmful UV radiation and increase the risk of skin cancer.
- ☐ **Perform skin checks regularly.** Examine your body, including your head, face, chest, trunk, arms, hands, private areas, legs, and feet for any new or unusual moles or growths. Do this frequently or as advised by your dermatologist.
- ☐ **Review your medications.** Some medications can increase your sensitivity to sunlight. Be sure to go over all your medications with your doctor so you'll know if you need to take extra steps for sun-safety.
- ☐ **Boost your overall health.** Not smoking, eating a healthy diet, exercising, and drinking enough water are all proven ways to improve the health and appearance of your skin, and keep you healthier overall.

Find the Right Treatment if You Are Diagnosed

If you are diagnosed with skin cancer, make sure to explore all your treatment options, including different types of treatment that work well together to improve your long-term prognosis. At Southeast Radiation Oncology Group (SERO) our expert team of radiation oncologists specialize in radiation therapy for skin cancer treatment. As an alternative to surgery, radiation therapy is minimally invasive, has only minor side effects, and helps you heal quickly. If you or someone you know has skin cancer, contact us to learn how we can help.

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