

ADVANCES IN ONCOLOGY

Current Developments in the Management of Solid Tumor Malignancies

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Skin Care for Cancer Patients



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H&O Approximately how many cancer patients will experience skin reactions due to their treatment?

ML Of the 1.5 million people diagnosed with cancer every year in the United States, approximately 900,000 will receive chemotherapy, approximately 600,000 will receive radiation, and most will undergo a surgical biopsy or procedure as part of their treatment. Among the patients who receive chemotherapy, approximately one third to one half will experience some sort of dermatologic adverse event. The most severe of these dermatologic adverse events occur with some of the newer drugs, the so-called targeted therapies. What is important to note is that many of these new drugs are being used to treat the most common types of cancers, such as lung, colorectal, and breast. In addition, among patients receiving radiation—for cancers of the head and neck, breast, genitals, and rectum—more than half will develop skin burns and irritation at the area of radiation. Among the patients who undergo surgery, approximately 10–15% will experience problems due to scarring. Taken as a whole, a great number of patients who are treated for the common types of cancers—lung, breast, and colorectal—receive either chemotherapy, radiation, or surgery, and a significant amount will have dermatologic adverse events. Moreover, once treatments are complete, most of the more than 13 million cancer survivors will be left with sequelae of their treatment, which are a constant reminder of their previous diagnosis.

H&O What are the most common skin conditions found in cancer patients?

ML The most common skin conditions found in cancer patients are skin irritation, acne-like rashes (Figure 1), nail changes, hand-foot syndrome (Figure 2), and dry-



Figure 1. An acne-like rash associated with treatment in a cancer patient.

ness. Severely dry skin can become very itchy, and it can be susceptible to infection. Mucositis can also occur, particularly after radiotherapy (Figure 3). In addition, some types of chemotherapy agents are frequently associated with nail changes. The nails may become very brittle or painful, or they may become infected. Some patients lose their nails. Hair loss from the scalp is a common complaint, but patients can also experience changes in hair texture or hair growth in unusual places. With some of the newer drugs, patients may grow more hair on the face, and the texture of the hair can become more curly or very dry.

One of the most important dermatologic adverse events is rash. These rashes resemble teenage acne, although most of the patients are not teenagers. The rashes are associated with pain, itching, and decreased quality of life because they affect the entire face and chest, areas that are visible to other people. Another adverse event, hand-foot syndrome, is a less noticeable but very painful condition resulting from multikinase



Figure 2. Hand-foot syndrome associated with multikinase inhibitors (sorafenib, sunitinib, pazopanib, and axitinib).

inhibitors, anthracyclines, or antimetabolites. More than half of cancer survivors report skin conditions, which can be associated with depression and anxiety due to their psychosocial impact.



Figure 3. Mucositis in a cancer patient that occurred after treatment with mTOR inhibitors (everolimus and temsirolimus).

H&O Are there any severe skin conditions associated with cancer therapy?

ML There are very serious rashes, such as Stevens-Johnson syndrome and toxic epidermal necrolysis, that can be life-threatening but are rare. Some of the new targeted drugs (eg, sorafenib [Nexavar, Bayer/Onyx], vemurafenib [Zelboraf, Daiichi Sankyo/Genentech]) paradoxically can cause the growth of skin cancers. These rare but important adverse events affect only a minority of patients, but they must be attended to early on in order to minimize any life-threatening situations.

H&O How often must treatment regimens be altered because of skin conditions?

ML In a survey we conducted of more than 100 oncology practices in the United States, it was found that two-thirds of oncologists had to modify the dose of EGFR-targeted agents because of a rash alone. One-third of oncologists had to stop these drugs because of rash alone. Although such measures are less frequent with cytotoxic chemotherapy, the expanding use of targeted therapies will result in more patients developing skin events that require dose modifications if not managed appropriately.

H&O In what circumstances does a skin condition indicate that the cancer treatment is working?

ML With many of the newer targeted therapies, such as erlotinib (Tarceva, Genentech), cetuximab (Erbitux, ImClone), panitumumab (Vectibix, Amgen), and bortezomib (Velcade, Millennium), patients who develop a rash tend to have a better response to the treatment. Although this correlation exists,

it is still necessary to treat the adverse event so that it does not lead to discontinuation of treatment. Also, it is important to remember that if patients do not develop a skin condition, it does not mean that the treatment is not working.

H&O What should cancer patients know about skin conditions before they start treatment?

ML Patients should treat their skin gently before treatment because most anticancer drugs will cause their skin to become dry. They should use gentle soaps and detergents without fragrances, take short showers with lukewarm water, use a moisturizer after each shower, and avoid the use of skin care products that have many—more than 10—ingredients.

Patients must be careful with sun exposure because most chemotherapies cause photosensitivity, which is an increased sensitivity or susceptibility to sunburn. When patients are outdoors, they are advised to wear sunglasses that protect against ultraviolet light, a broad-brimmed hat, and clothing that protects against ultraviolet radiation, especially between 10 AM and 4 PM. In addition, they should liberally apply sunscreen with a sun protection factor (SPF) of at least 15 every 2 hours—or even more frequently if they are swimming or sweating.

H&O How are some of the more common skin conditions managed?

ML The goal is to allow patients to stay on their treatment so they can receive the most benefit. These skin conditions, which are inflammatory or infectious in the majority of cases, are treated with topical or oral anti-inflammatory medications, such as corticosteroids, as well as topical or oral antibiotics. In the majority of cases, the use of either or both of these modalities is able to mitigate any type of reaction. Persistent or permanent hair loss may be treated with minoxidil or supplements, and scars can be effectively treated with topical, intralesional, or surgical methods performed by a dermatologist or plastic surgeon.

H&O When is referral to a dermatologist indicated?

ML According to studies, only approximately 8% of patients are referred to a dermatologist when they develop adverse events due to cancer treatment. This low number reflects both the lack of accessibility to dermatologists and the length of time it can take to see one. Many patients develop rashes unexpectedly and need treatment quickly, and are therefore unable to wait several weeks for an appointment with a dermatologist. Patients receiving medication that causes a significant number of skin-related adverse events should be referred—probably even before they start treatment—to a dermatologist. Referral

to a dermatologist is also indicated whenever there is an adverse event that persists beyond the initial treatment prescribed by the oncologist. Approximately 50% of cancer survivors report that they have seen a dermatologist for a skin condition that resulted from their treatment.

H&O What steps can cancer patients take after treatment?

ML Patients can minimize sun exposure and moisturize their skin. If their skin is very itchy or dry, patients can take oatmeal baths. Very gentle, thick moisturizers can be applied within 15 minutes of leaving the shower and then again before going to bed. In addition, patients should take medications at the appropriate times. For example, it is known that many drugs must be taken on an empty stomach because if they are taken with foods, they are absorbed more and may be more likely to cause adverse reactions.

Many patients are suffering in silence due to skin reactions to cancer treatments. In many cases, patients fail to tell their oncologists about these adverse events because they do not want their treatment withheld. It is important, however, for patients to know that there are treatments for most of these conditions, so that they can continue to receive life-saving or life-prolonging therapy while maintaining a high quality of life.

Suggested Readings

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