Understanding Non-Melanoma Skin Cancer (NMSC) in Skin of Color: A Guide for Patients

Zaim Haq

What is Non-Melanoma Skin Cancer?

Non-melanoma skin cancer (NMSC) includes a variety of skin cancers, each with unique causes, appearances, and patterns. The main subtypes of NMSC are basal cell carcinoma (BCC) and squamous cell carcinoma (SCC), which start in the top layers of your skin. Other types include sebaceous carcinoma, adnexal carcinoma, extramammary Paget's Disease (EMPD), dermatofibrosarcoma protuberans (DFSP), and atypical fibroxanthoma (AFX)[1, 2, 3]. These cancers may look different on your skin depending on your skin color. For instance, if you have darker skin NMSC might show up in less typical places like your legs or feet making it harder to spot early. Understanding the signs and risk factors for NMSC, particularly across diverse skin tones, is crucial for both early detection and treatment[3, 4].

Basal Cell Carcinoma (BCC)

Basal cell carcinoma (BCC) is the most common type of skin cancer worldwide and among people with skin of color. Although BCC is more common in individuals with lighter skin, anyone can get it. It often appears as a shiny or waxy bump, especially on parts of your body that get more sun exposure. However, if you have darker skin, you might notice that these bumps have more color, with over half of BCC cases showing this pigmentation. Genetic conditions such as Gorlin syndrome or scars from past injuries can also increase your risk of developing BCC. However, BCC usually grows slowly and doesn't usually spread to other parts of the body, making it easier to treat successfully with surgeries like local excision or Mohs surgery[5, 6, 7].

Squamous Cell Carcinoma (SCC)

Squamous cell carcinoma (SCC) is the second most common type of skin cancer and develops from the outer layer of your skin. It usually looks like a scaly or crusty spot on areas of your skin that receive a lot of sunlight but can also appear in scars or long-standing wounds. When SCC is caused by sun exposure, it generally has a low chance of spreading to other parts of the body, about 1-4%, in Caucasian populations. However, a specific type of SCC that grows in areas of long-term scarring—something seen more often in African American individuals—has a much higher risk of spreading, with rates between 20-40%. For those with skin of color, factors like ongoing inflammation, scars, exposure to certain chemicals, and previous radiation therapy can also increase your risk of getting SCC [3,4,7].

Sebaceous Carcinoma

Sebaceous carcinoma is a rare and aggressive type of cancer that starts in the skin's oil glands, often in the eyelids. This cancer might show up as painless yellow to red-brown lumps, more commonly seen in Asian individuals, while people of Caucasian backgrounds might notice their eyelids feeling thicker. When diagnosing sebaceous carcinoma, doctors also consider other

eyelid conditions like chalazion or blepharitis. Catching and treating this cancer early is very important as it may spread within the area or even to distant parts of the body [8, 9, 10, 11, 12].

Adnexal Carcinoma

Adnexal carcinoma is a rare type of skin cancer that develops from the skin's adnexal structures, such as sweat glands, oil glands, and hair follicles. This cancer typically looks like a small, white, or pink bump that you might find on your face or neck. For those with skin of color, these less obvious signs of adnexal carcinoma can make early detection challenging, since it may look similar to other skin conditions like Merkel cell carcinoma or amelanotic melanoma. Getting an early and accurate diagnosis, which includes a detailed skin check and analysis of the tissue by a dermatologist, is key to finding the best treatment options for adnexal carcinoma for people of all skin types[12, 13, 14, 15].

Extramammary Paget's Disease (EMPD)

Extramammary Paget's Disease (EMPD) is a rare skin cancer mainly affecting the genital and perianal areas, particularly in women. It usually shows up as a red, scaly patch that might itch or burn. In a study evaluating EMPD in Indian patients, the most common sign of EMPD was a well-defined plaque with crusting and erosion. Since EMPD can look a lot like more common skin problems, such as atopic dermatitis, early diagnosis may be challenging. EMPD can also be a sign of other hidden cancers, so it's important to have a thorough check-up by your physician when EMPD is diagnosed to make sure you receive the right diagnosis and treatment[16, 17, 18].

Dermatofibrosarcoma Protuberans

Dermatofibrosarcoma Protuberans (DFSP) is a rare and slowly growing type of soft tissue cancer that develops in the dermis, the deeper layer of your skin. It usually looks like a firm, raised patch, which could be mistaken for a simple scar or a dermatofibroma. Though it's not very common, DFSP makes up about 10% of all skin cancer cases in African-American patients. For those with darker skin, DFSP can appear as purple, reddish-brown, or skin-colored plaques. African-American individuals are also seven times more likely to get a type of DFSP called the Bednar tumor, which appears more pigmented and accounts for 1% to 5% of DFSPs. Additionally, DFSP lesions that look like keloids are often found in both African-American and Asian patients[8, 19, 20, 21].

Atypical Fibroxanthoma (AFX)

Atypical fibroxanthoma (AFX) is a rare, less aggressive form of skin cancer that usually appears as a pink or red lump on the skin exposed to the sun and is often found in older adults. However, for individuals with skin of color, it's important to remember that changes in skin pigmentation can make the lump look different, which might make it harder to recognize. Since it may look similar to other skin conditions like squamous cell carcinoma and Merkel cell carcinoma, your dermatologist will often have the tissue examined under a microscope to attain a correct diagnosis. If AFX grows near big nerves, you may also feel burning or numbness or have trouble

moving. The good news is, AFX usually has a positive outcome if it's removed surgically early on[22, 23, 24].

Non-Melanoma Skin Cancer in Skin of Color Patients

NMSC in people with skin of color may not always show up as clear changes on the skin and can be confused with other skin issues, making diagnosis difficult. You should look out for signs like sores that don't heal, unusual growths in scars or areas with chronic skin conditions, and notable changes on your legs or the bottoms of your feet. If you notice any new, changing, or strange skin marks, it's important to see a dermatologist, particularly if these marks keep coming back or are in uncommon places[3,4]. Understanding the unique signs of NMSC in your skin type is essential for accurate and early diagnoses and treatments. Scheduling yearly visits with a dermatologist can significantly enhance your chances of a positive outcome and help maintain your skin health.

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