

Stress and Anxiety Surrounding Nonmelanoma Skin Cancer Diagnoses: An Overview for Patients and Caregivers

Taylor Arnoff

Nonmelanoma skin cancer (NMSC) is the most prevalent type of cancer worldwide, and receiving a diagnosis can cause patients significant levels of psychological distress. An estimated 25% of patients newly diagnosed with cancer experience symptoms of depression.¹ Cancer worry is a psychological response seen in patients diagnosed with all cancer types.

Despite NMSC having low morbidity and mortality rates, the potential for further spread and recurrence can be a notable source of distress for patients. NMSC typically appears in highly visible areas of the body, with up to 80% of cases occurring on the face. Facial NMSC is associated with the highest rate of tumor recurrence.

Because of the immunogenic nature of skin cancer tumors, the stress surrounding a NMSC diagnosis can play a role in further skin cancer development and progression.² Immune dysregulation due to stress can result in a poorer immune response to skin tumors, and can also increase future susceptibility to additional skin cancers, including melanoma. Patients who receive a diagnosis of NMSC must therefore engage in life-long preventative behaviors as well as continuous monitoring for recurrence, which can further exacerbate stress and anxiety.

Psychosocial functioning can also be impacted by facial skin cancer surgery, as scars can alter facial appearance. Studies have demonstrated that patients most frequently report self-consciousness, unhappiness, and insecurity within three months following surgery, but self-consciousness can persist in the postoperative period.³ Younger age, history of anxiety or depression, surgery on the nose, and flap repair have also been shown to be independently predictive of psychosocial distress.

A study investigating 637 patients with biopsy-proven skin cancer demonstrated that some degree of cancer worry was reported by 97.3% of patients.⁴ The extent of this anxiety is likely explained by the stressors surrounding a cancer diagnosis in addition to the uncertainty regarding prognosis. A direct relationship was found between tumor size and the severity of cancer worry, suggesting that patients may equate disease severity with the presence of visible disease.

Interestingly, cancer worry has not been shown to be associated with skin cancer type.⁴ This signifies that patients diagnosed with NMSC do experience similar levels of worry surrounding tumor progression, recurrence, and the ongoing need for support as patients diagnosed with melanoma. Factors found to be associated with a higher degree of cancer worry include unmarried status, unemployment, living alone, and history of melanoma.

Clinical experiences have demonstrated that a subset of patients diagnosed with NMSC experience significant emotional strain, particularly during the period surrounding Mohs micrographic surgery (MMS). Because MMS requires repeated surgeries and waiting periods between, patients can face considerable stress from this treatment process. However, following surgery, cancer worry was found to decrease, suggesting that treatment can help mitigate worry and anxiety in the long-term.

Patients with NMSC may cope with their diagnoses through several strategies, including behavioral escape avoidance and distancing, focusing on the positive, and seeking social support. Studies have demonstrated that patients with NMSC are more likely to cope with their diagnoses by using behavioral avoidance, which can further worsen distress and impede the ability to adhere to medical recommendations.⁵ As a result, patients who use these coping strategies are at a higher risk for subsequent skin cancer development. Psychosocial interventions targeting these harmful coping mechanisms have the potential to enhance patient psychological wellbeing following a NMSC diagnosis.

Because patients do not typically talk candidly about the stressors surrounding their NMSC diagnoses, physicians may not be aware of them. It is critical for dermatologists to inquire about whether patients with NMSC are suffering from distress, as depression has been associated with increased costs and resource utilization, decreased quality of life, and a decline in adherence to medical advice, all of which can worsen patient outcomes.

References

1. Radiotis G, Roberts N, Czajkowska Z, Khanna M, Körner A. Nonmelanoma skin cancer: disease-specific quality-of-life concerns and distress. *Oncol Nurs Forum*. 2014;41(1):57-65. doi:10.1188/14.ONF.57-65
2. Shidlo N, Lazarov A, Benyamini Y. Stressful life events and the occurrence of skin cancer. *Psychooncology*. 2024;33(5):e6343. doi:10.1002/pon.6343
3. Vaidya TS, Mori S, Dusza SW, Rossi AM, Nehal KS, Lee EH. Appearance-related psychosocial distress following facial skin cancer surgery using the FACE-Q Skin Cancer. *Arch Dermatol Res*. 2019;311(9):691-696. doi:10.1007/s00403-019-01957-2
4. Khoshab N, Vaidya TS, Dusza S, Nehal KS, Lee EH. Factors contributing to cancer worry in the skin cancer population. *J Am Acad Dermatol*. 2020;83(2):626-628. doi:10.1016/j.jaad.2019.09.068
5. Roberts N, Czajkowska Z, Radiotis G, Körner A. Distress and coping strategies among patients with skin cancer. *J Clin Psychol Med Settings*. 2013;20(2):209-214. doi:10.1007/s10880-012-9319-y