New Guidelines of Care for the Management of Nonmelanoma Skin Cancer

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In January 2018, the American Academy of Dermatology (AAD) released its first guidelines of care for the management of nonmelanoma skin cancer (NMSC), which established official recommendations for the treatment of basal cell carcinoma (BCC)[1] and cutaneous squamous cell carcinoma (cSCC).[2] The guidelines will help dermatologists address the growing health concern of skin cancer, which remains the most common of any type of cancer in the United States.[3] Affecting more than 3 million Americans every year, NMSC is the most common type of skin cancer, and its incidence has continued to increase every year over the past few decades.[3,4] During the past 30 years, the incidence of both BCC and cSCC has more than doubled.[5]

Commonly used guidelines for the management of NMSC are available from the National Comprehensive Cancer Network (NCCN).[6,7] Although the NCCN aimed to develop multidisciplinary guidelines, the new AAD guidelines were established primarily by dermatologists for dermatologists. The NCCN guidelines frequently are referenced throughout the new AAD guidelines, which also recognize the importance of multidisciplinary care. The authors of the AAD guidelines noted that, although many of the NCCN recommendations reiterated prevailing knowledge or current practice, some recommendations highlighted alternative tenets that were not as widely considered or were supported by insufficient evidence.

The AAD guidelines address the complete management of NMSC, which includes biopsy technique, staging, treatment, follow-up, metastatic disease, and prevention.[1,2] Also included are evidence tables evaluating the current literature and available recommendations.

BCC Guidelines

For suspected BCCs, the recommended biopsy techniques are punch biopsy, shave biopsy, and excisional biopsy, all of which can detect the most aggressive histology subtypes.[1] Rebiopsy is recommended if the initial specimen is inadequate. The pathology report should include histologic subtype, invasion beyond the reticular dermis, and perineural involvement. The AAD guidelines do not include a formal staging system for risk stratification but rather refer to the NCCN guidelines, which take both clinical and pathologic parameters into account. The AAD treatment recommendations are based on this stratification.[1]

Treatment of BCC includes a broad range of therapeutic modalities. Recurrence rate, preservation of function, patient expectations, and potential adverse effects should be considered in the treatment plan.[1] Curettage and electrodessication may be considered for low-risk tumors in nonterminal hair-bearing locations. Surgical excision with 4-mm margins is recommended for low-risk primary tumors. For high-risk BCC, Mohs micrographic surgery is recommended, although standard excision along with attention to margin control may also be considered. Nonsurgical treatments also may be considered when more effective surgical therapies are contraindicated or impractical. If surgical therapy is not feasible or preferred, other treatment options for low-risk BCCs include cryotherapy, topical 5-fluorouracil, topical imiquimod, photodynamic therapy, or radiation therapy; however, the cure rates for these modalities may be lower than with surgical treatment. The AAD guidelines also note that there is insufficient

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The authors report no conflict of interest.

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evidence to recommend routine use of laser or electronic surface brachytherapy.[1]

Multidisciplinary consultation is recommended in patients with metastatic BCCs along with first-line treatment with a smoothened inhibitor.[1] Alternative treatment options include platinum-based chemotherapy and/or supportive care. For locally advanced disease, surgery and radiation therapy remain the initial treatments, but smoothened inhibitors and supportive care are suitable alternative treatments.[1]

The AAD guidelines also offer recommendations for follow-up and reducing future risk of skin cancer. After the first diagnosis of BCC, a skin cancer screening should be performed at least annually, and patients should be counseled about self-examinations and sun protection.[1] Topical and oral retinoids are not recommended for the prevention of additional skin cancers, nor is dietary supplementation with selenium or beta-carotene. There also is insufficient evidence regarding the use of oral nicotinamide, celecoxib, or α-difluoromethylornithine for chemoprevention of disease.[1]

cSCC Guidelines

For suspected cSCCs, no single optimal biopsy technique is recommended, but repeat biopsy may be considered if the initial biopsy is insufficient for diagnosis.[2] The guidelines further recommend an extensive list of elements to be included in the final pathology report (eg, lesion size, immunosuppression, depth of invasion, degree of differentiation). There is no universally recognized stratification for localized cSCC; therefore, the AAD guidelines refer to the framework provided by the NCCN. Also mentioned is the recent release of the American Joint Committee on Cancer's staging manual,[8] which includes the management of cSCC in conjunction with all SCCs of the head and neck. The Brigham and Women's system[9] was considered as an alternative classification system; however, the NCCN guidelines were chosen because they primarily provide clinical guidance for treatment of cSCC rather than provide accurate prognostication or outcome assessment.

Considerations for surgical treatment of cSCC are similar to those for BCC.[2] In low-risk tumors, surgical excision with 4- to 6-mm margins to the midsubcutaneous fat or curettage with electrodessication may be considered. Mohs micrographic surgery or standard excision with attention to margin control may be considered for high-risk tumors. Nonsurgical therapies generally are not recommended as a first-line treatment, particularly in cSCC, due to possible recurrence and metastasis. When nonsurgical therapies are preferred, options may include cryosurgery or radiation therapy, with the understanding that cure rates may be lower than with surgical options. Topical therapy with imiquimod or 5-fluorouracil as well as photodynamic or laser therapy are not recommended for cSCCs.[2]

For patients with metastatic cSCC or locally advanced disease, multidisciplinary consultation is recommended.[2] In cSCCs with regional lymph node metastases, the recommended approach includes surgical resection with possible adjuvant radiation therapy and/or systemic therapy. For inoperable disease, combination chemoradiation may be considered. Epidermal growth factor inhibitors and cisplatin may be considered in metastatic disease, although there are limited data to support their efficacy. As with BCC, all patients with cSCCs should receive supportive and palliative care to optimize quality of life.[2]

Recommendations for follow-up after the first diagnosis of cSCC are the same as those for BCC.[2] Additionally, acitretin is the only therapy that may be beneficial in the reduction of recurrent skin cancer in patients who are solid-organ transplant recipients.

Final Thoughts

A comprehensive understanding of the management of NMSC and the evidence on which recommendations are based is critically important for optimal patient care. These guidelines are an efficient way for dermatologists and their colleagues to understand the latest evidence and recommendations. The AAD guidelines provide support for clinical decision making with standardized approaches to the diagnosis, care, and prevention of NMSC that are consistent with established practice patterns.

With few exceptions, surgical therapy is the most effective approach for the treatment of BCC and cSCC; however, the AAD guidelines include an important review on nonsurgical management options.[1,2] The AAD guidelines help to highlight where data on evidence-based outcomes exist and reveal where data remain insufficient. This is illustrated by the guideline recommendations for providing additional histopathologic characteristics in the pathology reports, which will likely produce future data to enhance the prognosis and eventual treatment of patients with NMSC.[1,2] Future guidelines also may include newer technologies (eg, gene expression profiling).

The guidelines do not cover the management of premalignant and in situ lesions, nor do they provide details on the management of metastatic or locally advanced disease. These topics certainly will require a similar critical review and may be addressed separately. The guidelines are identifying unanswered questions about patient care and are concurrently establishing the collection of appropriate data to answer these questions in the future.

Official guidelines often become the primary source for the measured standard of both treatment and outcomes in patient care; therefore, it is critical that dermatologists and the AAD take the lead in creating these guidelines so that we can provide our patients with the best evidenced-based comprehensive care.

The AAD guidelines emphasize the importance of considering the patient perspective in determining how to treat BCCs and cSCCs.[1,2] It is important for patients to understand the available treatment options and participate in their own medical care. The AAD work group for these

guidelines included patient advocates to ensure that the guidelines would promote further dialogue between physicians and their patients.

The AAD guidelines for the management of NMSC were developed by board-certified dermatologists and other experts in the field. They allow dermatologists to work with patients diagnosed with NMSC to determine the treatment option that is best for each individual patient.

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