

Shared Decision-Making for Older Adult Dermatology Patients

This case-based discussion highlights the importance of integrating clinical knowledge with the individualized patient scenario.

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Shared decision-making in medicine, including dermatology, is a collaborative approach to care involving joint consensus to determine management plans of conditions based on patients' preferences. It stems from the understanding that patients should have a significant role in shaping their health care and can make their individual values, preferences, and circumstances known to their provider.

This article describes several common challenging scenarios when treating older adult patients in which shared decision-making is particularly important to consider. We focus on treatment of basal cell carcinoma (BCC), actinic keratosis (AK), and itch.

Low-Risk Basal Cell Carcinoma

Dermatologists frequently encounter decision-making scenarios when treating older adults, particularly in cases involving BCC, the most common human malignancy worldwide. The principle of shared decision-making assumes a critical role in navigating these situations, recognizing the need to tailor treatments based on various factors. For BCC, low-risk lesions are typically slow-growing cancers with minimal metastatic potential. Size, anatomic location, and histologic factors are important to consider.¹ A study conducted in Greece monitored 62 patients with lesions clinically suspicious for BCC and found that approximately half of the lesions increased in size over a mean follow-up time of 15.8 months, with an average change in area of 2.5 mm² per month.² There are several treatment options available to manage low-risk BCC, including Mohs surgery, excision, curettage and electrodesiccation, cryotherapy, fluorouracil, imiquimod, superficial radiation, and active surveillance. It is important to consider the frailty status (Geriatric 8 screening tool), overall health, social support, comorbidities, and life expectancy (Lee Schonberg Index) of older adult patients to select the optimal choice for each individual patient and avoid the oversimplification of treating based on chronologic age only.^{1,3} Active surveillance is a treatment option that can be revisited at scheduled follow-up appointments based on the patient's overall health status and personal goals, which may change over time.

Shared decision-making in this context involves a discussion



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about several management plans. Understanding the patient's values and the expected time frame for treatment benefits is crucial. This collaborative approach allows dermatologists and patients to make informed decisions that align with individual preferences while considering the accessibility to dermatology clinic follow-ups, which may be limited for some older individuals.

Shared decision-making was crucial in determining the appropriate management strategy for our case (see **Shared Decision-Making in Action**). A conversation involving the patient, her daughter, and the dermatologist led to the decision to opt for "watchful waiting," considering the low risk and asymptomatic nature of the lesion. This approach was chosen based on a comprehensive assessment of this patient's clinical circumstances and a discussion of the risk of each treatment option, including expectant management and the patient's goals. Assessing factors such as mentation, comorbidities, and caregiver support is particularly important and should be integrated in the shared decision-making discussion.

Shared Decision-Making in Action

A 90-year-old woman with multiple comorbidities, including moderate cognitive impairment, atrial fibrillation, diabetes, and hypertension, presented with an irregularly shaped, translucent papule with arborizing vessels on her shin. Her current medications included an oral anticoagulant (apixaban). With her consent, we performed a biopsy. Pathology confirmed the lesion to be a superficial and nodular BCC. At her follow-up appointment, we discussed potential treatment options. The patient was accompanied by her daughter due to her moderate cognitive impairment. First, we discussed the standard of care with the patient, which included a referral to a Mohs micrographic surgeon for surgical excision of the lesion. Next, we carefully reviewed the risks and benefits of Mohs surgery, such as the fact that it offers the highest cure rate. However, the patient and her daughter were against the surgical approach due to concerns about possible risk, healing time, infection, and bleeding and wanted to pursue a less invasive approach. We also explained the typically slow-growing nature of low-risk BCC. We decided on active surveillance as a management strategy given the size (smaller than 1 cm), histology (superficial and nodular type), and location (shin) of the asymptomatic primary lesion in an immunocompetent patient. Furthermore, the patient was able to attend future skin checks in the clinic with caregiver support to monitor the lesions.

Actinic Keratosis

AKs are common premalignant skin lesions induced by prolonged exposure to cumulative ultraviolet radiation, with an estimated global prevalence rate of 14%.⁴ Approximately 0.5% to 10% of AKs may progress to squamous cell carcinoma, with a latency period for malignant transformation estimated at around 2 years.⁵ Fortunately, there are several different treatment approaches, and choosing the appropriate one(s) for the older adult patient requires balancing potential treatment benefits against negative side effects, particularly considering the patient's quality of life and likelihood of adherence. Common adverse reactions associated with AK treatments, such as 5-fluorouracil (5-FU), photodynamic therapy, and liquid nitrogen cryotherapy, include pain, inflammation, erythema, scaling, crusting, swelling, erosion, and dyspigmentation.⁶⁻⁸ These reactions affect up to 90% of treated patients and may range from mild to severe, impacting quality-of-life outcomes at least temporarily and potentially influencing patient adherence to treatment. Considerations for self-applied treatments, such as topical fluorouracil, involve the ability to visualize and reach the affected anatomic location. Effective communication regarding the risks and benefits of treatment is crucial for empowering patients to make decisions aligned with their preferences.

Liquid nitrogen cryotherapy is a widely employed treatment option for AKs, aiming to eliminate premalignant keratinocyte cells through freezing. Unlike topical 5-FU, liquid nitrogen cryotherapy is administered by health care providers during a clinic visit, offering several advantages. Liquid nitrogen cryotherapy is known for its speedy procedural nature, making it a time-efficient option for

patients and caregivers. Patients typically tolerate the pain associated with liquid nitrogen cryotherapy well, contributing to overall treatment acceptance. It also provides a more precise treatment approach, targeting specific areas of concern with greater accuracy. However, this approach requires consistent visits to the health care provider, which may be challenging for older adults who face health access difficulties, such as mobility and cognitive decline, transport needs, and caregiver support requirements. Additionally, in a previous randomized study examining the 12-month clinical clearance of AKs, sustained clearance of individual AKs using cryotherapy was lower (28%) compared to 5-FU (54%) and imiquimod (73%).⁹

The advantages of 5-FU treatment include its home application and field therapy approach, specifically targeting areas with significant solar damage to eradicate clinically visible abnormal cells, as well as those that are subclinical. However, it is essential to weigh these benefits against potential drawbacks. This therapy requires daily application over several weeks, which may pose challenges for some patients in terms of convenience and adherence unless a caregiver is available to assist.

The choice between liquid nitrogen cryotherapy and 5-FU involves considering various factors, including treatment speed, pain tolerance, precision, patient preferences, and clinic visit accessibility. Other options include photodynamic therapy and imiquimod, which should be approached similarly with a shared decision-making discussion of benefits vs risks.

It is important to note the 3 outcomes of an AK lesion: spontaneous remission, remaining stable with no further progression, or the progression into a cancerous lesion.¹⁰ With estimates suggesting that the risk of an AK lesion progressing to a malignancy is approximately 1% every 10 years, it may be reasonable to consider not treating these lesions depending on the patient's risk factors, comorbidities, life expectancy, and treatment goals.¹¹ Overall, it is important for dermatologists to educate patients about the risks and benefits of each management option and facilitate informed decision-making aligned with the individual circumstances of older adults.

Itch

Managing itch treatment escalation in older adult dermatology patients is another common challenging scenario. Chronic pruritus of unknown origin (CPUO) is most prevalent among the elderly population, yet it remains a relatively under-researched area with a wide array of treatment options. These options encompass drugs such as topical steroids, topical immunomodulators (tacrolimus, pimecrolimus), topical neuropathic agents (capsaicin), gabapentin, pregabalin, and narrow-band ultraviolet B, as well as second-generation antihistamines (loratidine, cetirizine), and systemic immunomodulators (dupilumab).¹²

For patients whose itch remains uncontrolled after topical steroid use, the decision to escalate to systemic therapies can be challenging given the limited safety data available and limited inclusion of older adults in randomized trials for these systemic therapies.¹³ Narrow-band ultraviolet light therapy can be attempted if the patient is able to stand in the booth. Second-generation

antihistamines can be considered, starting at low doses and increasing as needed and tolerated. These antihistamines have reduced central nervous system side effects, such as somnolence, and cetirizine has been tested in small numbers of older adult patients with decreased clearance. Dupilumab is currently being tested in clinical trials, including older adults, as an effective treatment for patients with CPUO. Previous studies in atopic dermatitis have reported an increased risk of conjunctivitis in patients taking dupilumab and adverse reactions such as headaches and upper respiratory infections. There is no evidence of increased risks in patients older than age 65 years taking dupilumab for indications other than CPUO.¹⁴

When selecting a systemic medication for itch treatment escalation in older adult patients with CPUO, clinicians face gaps in evidence to assist with decision-making. The decision-making process requires careful consideration of potential risks and benefits. Gabapentin has a short half-life and can be helpful for neuropathic pruritus, but it commonly causes somnolence and lower extremity edema. Multiple factors, including concomitant medication interactions, avoiding polypharmacy, and frequent assessment to monitor benefits and adverse reactions, are important to consider in the management of chronic pruritus. Shared decision-making should be an active process that is engaged and revisited on each visit to reassess needs, goals, and impacts of treatment.

Current Literature in Geriatric Dermatology

According to a recent literature review published in the *Journal of the American Medical Association* about shared decision-making in the field of dermatology, most patients want to be involved in decisions about their care.¹⁵ However, older adults are often excluded from making decisions in the medical context.¹

Many studies, particularly in the field of dermatologic oncology, have discussed the importance of shared decision-making. In the case of melanoma, a questionnaire-based study showed that more than 80% of patients with stage I to III melanoma want to take part in shared decision-making as many cancer treatments can lead to severe adverse effects.¹⁶ Moreover, for older adult patients with melanoma, research has shown that frailty should be a considered factor during shared decision-making before receiving checkpoint inhibitor treatment. High frailty scores have been correlated with increased hospitalization post-treatment.¹⁷

Additional research in shared decision-making within geriatric dermatology is needed. Acknowledging the vulnerability of geriatric populations, we believe that preserving and championing patient autonomy is of utmost importance, especially for older adults. Some practical pearls that can feasibly be implemented in the clinic despite systemic challenges include enlisting caregiver assistance to adhere to treatment plans, scheduling complex older adult patients at the end of the day to minimize impact on other patients due to running over scheduled time, and close follow-up and laboratory monitoring.

Conclusion

Regarding dermatology training for shared decision-making, a formal curriculum in geriatric dermatology should be developed for

implementation during post-graduate residency training to achieve optimal patient outcomes. Post-graduate continuing medical education programs on geriatric dermatology topics should be expanded. Researchers have developed patient decision aids for BCC treatments to inform patients of the pros and cons of each option. Such patient decision aids have been an integral part of shared decision-making and could be implemented when caring for older adult patients. Additional patient decision aids that are needed in geriatric dermatology include pre-cancer and chronic itch treatments. ■

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