Incorporating Discussion of Seborrheic Keratoses During Primary Care Visits

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ABSTRACT
Seborrheic keratoses are a common benign epidermal neoplasm in the elderly. Primary care physicians caring for adult and geriatric populations will observe them regularly during the physical examinations they perform on their patients. This quality improvement project was developed to determine if primary care physicians could provide additional benefit to their patients during office visits by addressing the concerns they may have about seborrheic keratoses. Data gathered by this project indicates that some patients could benefit from reassurance that their seborrheic keratoses are not skin cancer, or by making dermatology referrals if patient seborrheic keratoses are symptomatic, particularly if they are pruritic or bleeding. In addition, some patients may welcome a referral to a dermatologist who will be able to address any cosmetic concerns related to seborrheic keratoses, especially when they are present in visibly sensitive areas such as the face and hands.

INTRODUCTION
Seborrheic keratoses (SK) are a common benign epidermal neoplasm. The prevalence of SK increases with age and may be related to sun exposure.\textsuperscript{1} Although SK are often asymptomatic, they can itch, bleed, or become irritated, especially if they are traumatized. Patients may also be concerned about SK because of cosmetic disfigurement or skin cancer fears. Given that SK are so common, and primary care visits comprise such 52.2% of total health care visits\textsuperscript{2}, it is likely that primary care physicians will see a very high volume of SK in their practices. A Quality Improvement Project (QIP) was undertaken to determine if patients with chronic medical conditions in a primary care general internal medicine practice have worries about their SK that could be addressed during these clinical encounters.

METHODS
English and Spanish speaking patients age 65+ from a primary care outpatient clinic in San Antonio, Texas presenting for non-
dermatologic issues were asked structured and open-ended questions about SK and inspected for these benign epidermal tumors (Box 1). Patients were also excluded if they had dementia. Dementia was investigated by chart history, patient admission, or confirmation by a relative who attended the visit with the patient. A Likert Scale with response choices ranging from 1 to 5 was also used to determine how much SK bothered each patient, with “1” indicating no bother at all and “5” indicating significant distress. Descriptive statistics were used to analyze data. All patients were reassured by their primary care physician that their SK were benign and not skin cancer. Referrals were offered to dermatologists when the SK were symptomatic for evaluation and management. QIPs are currently exempt from IRB oversight at this institution.

RESULTS

Four participants of the 23 who volunteered to be examined for SK demonstrated no SK. No patients were excluded for dementia. Twelve men and seven women ranging from 65 to 89 years old (mean age 75.6 years) had SK on physical examination. The back was the most common location for SK (n=17), followed by the chest (n=14), face (n=11), abdomen (n=8), arm and hands (n=5), and leg and foot (n=2). Fourteen patients, several with multiple concerns, indicated that they were displeased with their SK by scoring higher than a 1 on the bother score (6), having worries about skin cancer (5), itching (5), having specific complaints about their SK obtained during open-ended questioning (4), or bleeding (2). Of the six patients reporting symptomatic SK (itching or bleeding), 3 patients had more than 20 SK, 2 had between 11 and 20 SK, and 1 had between 1 and 10. For the 5 patients found to be worried about skin cancer, only 2 asked the examining physician about it. The Likert Scale mean for the entire group of participants for SK was 1.4, the same as for the 5 participants that were worried that their SK were skin cancer. However, when the 6 patients were analyzed who had symptomatic SK (itching or bleeding) the Likert Scale mean was 1.7. The highest Likert Scale scores recorded were 3s by two women, one with a pruritic SK and the other who complained that she did not like their appearance. Three participating patients previously had seborrheic keratoses destroyed by liquid nitrogen or by surgical removal.

DISCUSSION

Seborrheic keratoses were very common among the participating group, with 79% (19/24) of examined participants having at least one seborrheic keratosis. In 2015 it was estimated that 84 million Americans have SK. Skin disease is a rapidly growing area of medical expense. Additionally, it has been estimated that skin disease results in 56.2 billion dollars in quality of life losses. Some patients presenting to dermatology practices are unhappy with their SK and are interested in treatment.

The number of patients with SK who complained of itching, bleeding, being bothered, worried about cancer, or had previously had SK removed was 14 (74%). It is interesting that despite patient concerns and occasional destructive treatment interventions, the Likert Scale Scores were relatively low, even for the subgroups with skin cancer concerns (1.4) and the group experiencing symptoms of itching and bleeding (1.7). A possible explanation for the relatively low Likert Scale Scores found in this primary care internal medicine practice is that none of these patients presented with...
Seborrheic Keratoses (SK) Quality Improvement (QI) Project Questionnaire

Gender: ____
Age: ___
Dementia: Yes/No
Identify Seborrheic Keratoses and ask patient how much they are bothered by their SK, on a scale of 1 to 5, with 1 being the least and 5 being the most.

1 2 3 4 5

If patient is bothered by SK, ask patient open ended question about how they find their SKs bothersome (include location of bothersome SK).

________________________________________________________________________

Does SK itch? Yes/No Location: ___________
Does SK bleed? Yes/No Location: ___________
Are you worried that an SK is skin cancer? Yes/No Location: ___________
Reassure patient that SKs are NOT skin cancers.

<table>
<thead>
<tr>
<th>SK Location/Number</th>
<th>None</th>
<th>1-10</th>
<th>11-20</th>
<th>&gt;21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arms/Hands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Chest</td>
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<tr>
<td>Abdomen</td>
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<td></td>
</tr>
<tr>
<td>Legs/Feet</td>
<td></td>
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Box 1. Seborrheic Keratosis Quality Improvement Primary Care Provider Tool
a chief complaint of SK, and that all participants were at their appointment for the management of multiple chronic health conditions such as diabetes mellitus, chronic obstructive pulmonary disease, congestive heart failure, and hypertension. This context of SK together with systemic illnesses could be causing patients to evaluate their SK concerns relatively lower compared to their primary medical issues.

This QIP indicates that there is potential patient benefit for primary care physicians to address patient concerns when SK are found on physical exams in their adult and geriatric patients. Additionally, since the back is the most frequent site for melanoma in the United States and this area of the body is difficult for patients to see, physician reassurance that there are only SK on the back and that no melanoma is present should be of great value. Among the effective and minimally invasive treatments of SK are cryotherapy for patients with relatively little pigmentation and electrodessication for patients with more melanin. Referral for SK that are symptomatic or atypical in appearance, possibly indicative of non-melanoma skin cancer or melanoma, is always appropriate. However, if SK are not symptomatic, their treatment is considered to be cosmetic. Important research by Del Rosso indicates that patients with cosmetic concerns about SK may welcome referral to dermatologists that can address this cosmetic concern.

**CONCLUSION**

It would be potentially beneficial to patient well-being if primary care physicians addressed patients concerns about SK during regular or non-emergent physical examinations. This is especially true considering the volume of patients that primary care physician likely see. The tool used in our QIP appears to be an easily-implementable provider instrument that could help to ensure streamlined attention to primary care patients with SK lesions. However, this QIP report is based on the primary care practice of one physician in an urban setting; any practice considering implementation of this process should consider adapting the tool to their own workflow and setting. Furthermore, future plan-do-study-act cycles in our program should examine the effect of this protocol on dermatology referral rates.

Patients should be reassured that SK are not cancer, and that if they are symptomatic, there are several minimally invasive and effective treatment options available. When asking patients about their SK in primary care practices, physicians and investigators should be aware that patients may be comparing their SK concerns relative to their general health complaints, resulting in understatement of their SK concerns.

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