dents with diabetes had a history of a lower-extremity ulcer.

Respondents with diabetes demonstrated a high rate of correct knowledge and attitudes regarding lower extremity skin care. Correct response rates exceeded 70% for all questions in these categories except for 2 items: two-thirds of Latinos with diabetes felt they should soak their feet, and one-third agreed or strongly agreed that “It is too difficult to check my own feet” (Table 1). Correct practices did not fare as well as correct knowledge and attitudes. Only half of Latino respondents with diabetes reported that they inspected their feet every day for the last 7 days. Fewer than half reported daily inspection of their toes. Only 60% stated that they washed their feet and dried between their toes daily during the previous week (Table 2).

The number of years since diagnosis of diabetes was not correlated with any knowledge, attitude, or practice. Weak correlations existed between respondent characteristics, knowledge, attitudes, and lower-extremity skin-care practices. The Cronbach α for the survey as a whole was 0.74 (knowledge, 0.73; attitudes, 0.75; and practices, 0.80). Intraclass correlation coefficients ranged from 0.60 to 0.81. The survey took 5 to 10 minutes to complete.

Comment. Latinos with diabetes merit focused attention with respect to lower-extremity skin care, but busy clinicians do not have an easy-to-use tool to rapidly assess gaps in practices. Although knowledge and attitudes were found to be highly favorable in this study, the true clinical benefit can only be derived from consistent practices such as coupling daily foot inspections with ingrained daily habits. To our knowledge, this study was the first to survey the knowledge, attitudes, and practices regarding lower-extremity skin care of Latinos with diabetes. It will hopefully serve as a basis to further explore effective strategies to improve skin ulcer prevention in this and other groups at high risk of lower-extremity skin ulceration. The survey developed in this study is a fast, reliable method to assess patient practices, highlighting where deficits exist and prompting discussion of ways to resolve barriers to good lower-extremity skin care.

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Author Contributions: Dr Muñoz had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. Study concept and design: Muñoz. Acquisition of data: Muñoz. Analysis and interpretation of data: Muñoz and Chang. Drafting of the manuscript: Muñoz. Critical revision of the manuscript for important intellectual content: Muñoz and Chang. Statistical analysis: Muñoz. Administrative, technical, and material support: Muñoz. Study supervision: Chang.

Additional Contributions: La Clinica de la Raza, Arbor Free Clinic, Pacific Free Clinic, St Anthony Free Clinic, and Santa Clara County Medical Center Wound Clinic provided assistance in this study.

REFERENCES


Gender Differences in Melanoma Awareness and Detection Practices Between Middle-aged and Older Men With Melanoma and Their Female Spouses

Invasive melanoma incidence and mortality rates have risen most steeply in the United States in middle-aged and older men. From 1969 to 1999, melanoma incidence increased 3-fold in middle-aged men and 5-fold in older men. During this period, mortality rates increased 66% in middle-aged men and 157% in older men compared with 19% and 49% in women in these age groups, respectively.1

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Men are less likely than women to examine their own skin, seek physician examinations for melanoma, or examine the skin of their spouses.2-4 Observed sex differences in melanoma awareness and detection practices have previously been reported in population-based studies of average-risk individuals and in siblings of patients with melanoma.5,6 Our aim was to compare awareness and screening practices in middle-aged and older men with melanoma with those of their unaffected female spouses and/or partners (hereinafter “female spouses”; only 7 of 158 women [4%] identified themselves as partners). Such information would be useful in planning family-based interventions to enhance early detection of melanoma in this high-risk group.

Methods. Male patients 40 years or older with invasive cutaneous melanoma and their female spouses were surveyed concurrently within 3 months of diagnosis at Stanford University Medical Center, Stanford, California; Veterans Affairs Palo Alto Health Care System, Palo Alto, California; and the University of Michigan Health System, Ann Arbor, from September 1, 2004, through January 31, 2006, as described elsewhere in this issue of the Archives.7 After providing their informed consent, couples were asked to complete surveys without consulting each other. Most survey questions pertained to the year prior to the man’s melanoma diagnosis.

Statistical analyses were performed using SAS software, version 9.1 (SAS Institute Inc, Cary, North Caro-
Table 1. Demographics and Risk Factors of Men With Newly Diagnosed Melanoma and Their Female Spouses

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Men (n=158)</th>
<th>Female Spouses (n=158)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age, y</td>
<td>63</td>
<td>59</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>White</td>
<td>97</td>
<td>95</td>
<td>.16</td>
</tr>
<tr>
<td>Graduated from a 4-year college or greater education</td>
<td>52</td>
<td>16</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Usually or always burned if exposed to the midday summer sun without any sun protection</td>
<td>46</td>
<td>44</td>
<td>.65</td>
</tr>
<tr>
<td>Never tanned or tanned with difficulty when repeatedly spending time in the sun</td>
<td>30</td>
<td>28</td>
<td>.71</td>
</tr>
<tr>
<td>Family history of melanoma (first-degree relative)</td>
<td>21</td>
<td>9</td>
<td>.002</td>
</tr>
<tr>
<td>Personal history of melanoma</td>
<td>8</td>
<td>4</td>
<td>.13</td>
</tr>
<tr>
<td>Personal history of nonmelanoma skin cancer</td>
<td>25</td>
<td>13</td>
<td>.003</td>
</tr>
</tbody>
</table>

a Unless otherwise indicated, data are reported as percentage of subjects.
b McNemar test for paired samples (158 male patients and 158 unaffected spouses).

Table 2. Skin Cancer Prevention and Skin Self-examination Practices and Use of Health Information by Men With Newly Diagnosed Melanoma and Their Unaffected Female Spouses

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Men (n=158)</th>
<th>Female Spouses (n=158)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard of the ABCD rule for melanoma</td>
<td>18</td>
<td>31</td>
<td>.004</td>
</tr>
<tr>
<td>Used sunscreen regularly</td>
<td>32</td>
<td>55</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Regularly wore a hat or long-sleeved shirt to protect from the sun</td>
<td>45</td>
<td>32</td>
<td>.02</td>
</tr>
<tr>
<td>Carefully examined all of your own moles</td>
<td>46</td>
<td>58</td>
<td>.04</td>
</tr>
<tr>
<td>Were instructed or given materials on how to look at your skin for signs of melanoma</td>
<td>25</td>
<td>38</td>
<td>.004</td>
</tr>
<tr>
<td>Read information about skin cancer detection</td>
<td>65</td>
<td>85</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Requested educational materials about skin cancer detection from your physician</td>
<td>3</td>
<td>8</td>
<td>.05</td>
</tr>
</tbody>
</table>

Abbreviation: ABCD, asymmetry, border irregularity, color variegation, and diameter greater than 6 mm.

Results. A total of 164 men of a larger cohort had female spouses, 6 of whom declined to participate (4% female spouse refusal rate); 158 couples completed dual surveys. Ninety-eight percent of female spouses lived with the affected man, and 94% had known him for at least 10 years.

The results of our analysis are summarized in Table 1 and Table 2. Female spouses were more likely than their husbands to (1) be aware of the ABCD rule (asymmetry, border irregularity, color variegation, and diameter >6 mm) (31% vs 18%) (P = .004); (2) read information about skin cancer detection (85% vs 65%) (P < .001); (3) perform skin self-examination (58% vs 46%) (P = .04); and (4) use sunscreen regularly (55% vs 32%) (P < .001), despite having lower levels of education (16% college education or beyond vs 52% for men) (P < .001). Men agreed or strongly agreed that their female spouses (1) ensured that the men went to see a physician (80%); (2) kept in touch with health matters better than the men did (69%); and (3) helped the men with skin self-examination (62%).

Comment. We sought to determine melanoma awareness and risk-reduction practices in the year prior to diagnosis for men with newly diagnosed melanoma and their unaffected female spouses. While other studies have demonstrated sex differences regarding melanoma awareness, ours is unique to our knowledge in its concurrent examination of awareness and detection practices in male patients and their unaffected female spouses. Despite having equal sun sensitivity and only half the rates of personal and/or family history of melanoma and nonmelanoma skin cancer, female spouses had greater melanoma awareness and risk-reduction practices than the men.

Recognition of the unique role of the female spouse is crucial to improving screening and skin self-examination (SSE) efforts in middle-aged and older men. Sex differences in SSE have been demonstrated, and earlier detection of melanoma by women is attributable, at least in part, to their greater health information-seeking practices. Schwartz et al found that women had significantly thinner primary melanomas than men, but men and women had equally thin second primary melanomas. Increased levels of awareness in both men and women were believed to contribute to detection of thinner subsequent melanomas, and these results suggest that heightened awareness can lead to earlier detection.

Joint education of patients and their partners may improve secondary prevention for melanoma. Robinson et al demonstrated significant improvement in SSE through couples training compared with solo learning in a randomized, controlled intervention designed to enhance partner participation. Efficacy of SSE improved with increasing quality of the couple’s relationship and the partner’s motivation and ability to provide social support.

Possible study limitations, as described previously, include reliance on self-reported information, recall bias, and uncontrolled findings resulting from potential differences in study sites.

In conclusion, female spouses should be made aware of their potential to improve their husbands’ melanoma screening practices. Health fairs, common to many areas, should consider integrating melanoma screening into existing women’s health services. How to publicize and frame messages to draw men’s attention and participation warrants further attention.

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Additional Contributions: Mitzi C. Rabe, RN, BSN, OCN, served as study coordinator at the University of Michigan. The Melanoma Prevention Working Group provided valuable contributions to the study design and analysis.


**COMMENTS AND OPINIONS**

**Ulcers Related to Acupuncture and Traditional Chinese Medicine: A Case Series and Review of the Literature**

Traditional Chinese medicine (TCM), which is considered a “safe” alternative to Western medicine, has gained popularity in the West. Acupuncture, a form of TCM, involves the insertion of needles into the body. While acupuncture is often regarded as a minimally invasive technique with minimal serious adverse effects,1 substantial adverse effects can occur leading to devastating consequences. Our literature review of PubMed articles published between 1970 and 2008 identified acupuncture-related cutaneous adverse events (Figure 1).1-4

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Herein we report 3 cases in which acupuncture was combined with 3 other forms of TCM: case 1, blood letting for “toxin release”; case 2, moxibustion (burning a small bundle of an herb called mugwort, or moxa, at the free end of the acupuncture needle to generate heat); and case 3, herbal wraps. The clinical history, findings of physical examination (Figure 2 and Figure 3), pathologic features, complications, and outcomes of the cases are summarized in the Table.

**Report of Cases.** Case 1. The compromised skin barrier and ulceration caused by repeated acupuncture treatments predisposed patient 1 to cutaneous and systemic infections, which could include abscess formation,4 atypical mycobacterial infections,5 osteomyelitis, infective endocarditis, and bacterial septicemia that could result in death.4 The importance of infection control measures, such as skin decontamination and sterilization of equipment,

![Figure 1](image1.png)

**Figure 1.** Common (>5 cases) and isolated reports (<5 cases) of cutaneous acupuncture complications found in the literature.