lished US studies but lower than reports in European studies. The European studies found a 1-year mortality varying between 19% and 41%. The younger age of patients with BP in our study (64.3 years) compared with the patient age in the European studies (74.0-82.6 years) might be responsible for this difference. The age distribution of the Chinese population differs from that of the European population in that Chinese persons 65 years or older represent only 0.83% of the total Chinese population, and those 80 years or older are only 0.88% of the total Chinese population.

Our SMR results are in accord with those reported in previously published European studies (SMR ranged from 2.15 to 15.3). A US study did not find a difference in mortality for patients with BP. Only hospitalized patients were included in our study, and time to death after first BP hospitalization was evaluated). This may explain our relatively higher SMR. Several studies have suggested a relationship between BP and neurologic diseases. The presence of neurologic disease was related to elevated mortality in our study. Results from recent reports, in which neurologic diseases also correlated with higher mortality, support our findings. The association of oral corticosteroid treatment alone with increased mortality may be because this treatment was used when patients with BP had poor general health.

**Table 2. SMRs of Observed Deaths in Patients With Bullous Pemphigoid vs Expected Deaths in the General Chinese Population**

<table>
<thead>
<tr>
<th>Age Group, y</th>
<th>Expected Mortality Rate</th>
<th>Observed Mortality Rate</th>
<th>SMR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-70</td>
<td>0.035</td>
<td>5 of 43.055</td>
<td>3.313 (2.779-3.847)</td>
</tr>
<tr>
<td>70-80</td>
<td>0.052</td>
<td>6 of 37.805</td>
<td>3.080 (2.526-3.634)</td>
</tr>
<tr>
<td>80-90</td>
<td>0.125</td>
<td>4 of 21.255</td>
<td>6.140 (4.367-7.913)</td>
</tr>
</tbody>
</table>

Abbreviation: SMR, standardized mortality ratio.

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Author Contributions: All authors had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. Study concept and design: Li. Acquisition of data: Zuo and Zheng. Drafting of manuscript: Li, Zuo, and Zheng. Critical revision of the manuscript for important intellectual content: Li. Statistical analysis: Li. Administrative, technical, and material support: Zuo. Study supervision: Li.

Conflict of Interest Disclosures: None reported.


**Effectiveness of Cryosurgery vs Curettage in the Treatment of Seborrheic Keratoses**

Seborrheic keratoses (SKs) are one of the most common types of skin lesions (prevalence, 69%-100% among adults older than 50 years). Although SKs are benign, patients with SKs frequently desire treatment for symptoms of itching and irritation or for cosmetic purposes. Seborrheic keratoses have been treated with varying efficacy by many techniques. Two effective options include cryosurgery and curettage. Our objective was to determine comparative efficacy of cryosurgery and curettage in the treatment of SKs on the trunk and proximal extremities.

Methods. Twenty-five adults, aged 52 to 75 years, with diagnoses of SK were enrolled in our study. Treatment options were curettage or cryotherapy, based on coin toss randomization. Lesions treated with curettage were injected with lidocaine, 1%, with epinephrine and buffer using a 30-gauge needle. A No. 15 scalpel was used to curette the lesions. Subjects were instructed to cover the wound with petrolatum and a bandage. Lesions treated with cryotherapy were treated using liquid nitrogen in a 1-cycle stutter technique to ensure that the freezing stayed within the confines of lesion and to ensure complete freezing for approximately 12 seconds.

For each participant, one SK lesion to be treated was identified on each side of the trunk or proximal extremities. When multiple SKs were present, 2 with similar characteristics (size and thickness) were selected.

Subject evaluations were obtained via questionnaire. Treatment sites were also evaluated based on texture and color variation by a blinded physician observer (L.D.W.) 6 weeks and more than 12 months after each intervention.

This study was approved by the Penn State Hershey institutional review board.

Results. At 6 weeks, 15 of 25 subjects preferred cryotherapy (60%), and 9 of 25 preferred curettage (36%). One of 25 was undecided (4%). At greater than 12 months, 11 of 18 preferred cryotherapy (61%), and 7 of 18 preferred curettage (39%). Seven subjects were lost to follow-up.

The patient rating scale for lesion cosmesis ranged from 1 (lesion unchanged) to 10 (normal-appearing skin). Mean ratings for cosmesis (reported as “6-week/>12-month”)
scores and \( P \) values) were 8.58/9.33 for cryotherapy and 8.28/9.39 for curettage (\( P = .57/\cdot .83 \)).

The blinded physician postoperative rating scale for lesion color ranged from -5 (most hypopigmented) to 5 (most hyperpigmented). Blinded physician color ratings were 1.56/1.00 for cryotherapy and 2.6/0.94 for curettage (\( P < .001/\cdot .004 \)). The blinded physician rating scale for lesion texture ranged from 1 (flat) to 10 (most elevated). Blinded physician postoperative texture ratings were 4.04/3.29 for cryotherapy and 1.76/1.41 for curettage (\( P = .001/\cdot .01 \)).

The mean scores for pain with treatment on a 10-point scale (10 most painful) were 2.52 and 1.76 for cryotherapy and curettage treatments, respectively (\( P = .03 \)). At the longer follow-up time, 7 of 11 patients who preferred cryotherapy over curettage indicated that decreased postoperative wound care was a primary reason for this preference (64%).

Comment. This pilot study shows that the majority of patients preferred cryotherapy over curettage at both the 6-week and greater-than-12-month survey time points. This preference is apparently owing to decreased wound care with cryotherapy and is present despite subjects’ statistically significant rating of a higher level of pain with cryotherapy compared with curettage. There are no statistically significant differences in subject ratings for cosmesis at either time point.

There are, however, statistically significant differences between the 2 techniques in blinded physician ratings at both time points. More redness at 6 weeks and tendency for hypopigmented scar formation at greater than 12 months occurred with curettage. Leftover SK lesion occurred more frequently with cryotherapy in the short and long term.

Limitations of this study include the following: (1) Enrolled participants had Fitzpatrick skin types 1, 2, or 3; (2) SK lesions may have different properties and treatment responses in different regions of the body (ie, face vs trunk), and therefore, these results may not be generalized to all SK cases; (3) patient preferences may have been influenced by age, with older patients tending to care less about complete resolution of lesions; (4) the study compares only 2 methods of SK removal, and there are other techniques that may be more effective; and (5) generalizability may be limited because in dermato logical practice, there is lack of standardization of cryotherapy technique.

In summary, this study highlights that both cryotherapy and curettage are effective methods of removing SKs that lead to slightly different yet highly satisfactory cosmetic outcomes. The majority of patients preferred cryotherapy for SK removal on the trunk and proximal extremities. If a patient has multiple SKs, it may be appropriate to treat one lesion with each treatment type (or an alternative) and then allow the patient to choose their preference for future treatment of additional lesions. The blinded physician postoperative scale for lesion color ranged from -5 (most hypopigmented) to 5 (most hyperpigmented). Blinded physician color ratings were 1.56/1.00 for cryotherapy and 2.6/0.94 for curettage (\( P < .001/\cdot .004 \)). The blinded physician rating scale for lesion texture ranged from 1 (flat) to 10 (most elevated). Blinded physician postoperative texture ratings were 4.04/3.29 for cryotherapy and 1.76/1.41 for curettage (\( P = .001/\cdot .01 \)).

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Author Contributions: All authors had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. Study concept and design: Wood, Hollenbeak, and Miller. Acquisition of data: Wood, Stucki, and Miller. Analysis and interpretation of data: Wood, Hollenbeak, and Miller. Drafting of the manuscript: Wood, Stucki, and Miller. Critical revision of the manuscript for important intellectual content: Wood, Hollenbeak, and Miller. Statistical analysis: Hollenbeak. Administrative, technical, and material support: Wood and Stucki. Study supervision: Wood and Miller.

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VIGNETTES

**Pagetoid Dyskeratosis With Parallel Ridge Pattern Under Dermoscopy**

A parallel ridge pattern under dermoscopy is a prominent dermoscopic finding in macules of malignant melanoma on the palms and soles. Herein, we present a case of pagetoid dyskeratosis with a parallel ridge pattern under dermoscopy.

**Report of a Case.** A 34-year-old Japanese woman was seen with a 1-year history of brownish pigmentation on her left small finger, which had expanded and intensified in color during the previous 2 weeks (Figure 1A). She was an office worker and a nonsmoker. There was no history of contact with chemical substances or dyes.

On examination, there was a conspicuous brownish patch without itch or pain around the tip of the left small finger. Neither nail deformity nor discoloration was seen. Dermoscopic examination revealed parallel ridge patterns and fibrillar patterns (Figure 1B). Hutchison sign was negative. The finding of parallel ridge patterns sug-