to recognize potential mimickers or confounders. Though larger studies are needed, we postulate a benefit for screening patients undergoing evaluation for chronic urticaria who have a suggestive dietary history and live in regions where the α-gal syndrome is common.

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Comparison of Injuries From Sharps Among Resident Physicians Within Dermatology and Other Medical and Surgical Specialties

Injuries from sharps represent a safety concern in the form of exposure to bloodborne pathogens, as well as a financial burden on health care systems, with a mean cost per injury of $750 in 2015. 1,3 About 18% of the approximate 385,000 annual

Table 2. Characteristics for Patients With Detectable Serum Levels of IgE Antibodies Against α-Gal and Available Dietary History

<table>
<thead>
<tr>
<th>Patient No./Sex/Age at Enrollment, y</th>
<th>Diagnosis</th>
<th>α-Gal Level, IU/mL</th>
<th>Total Serum IgE, IU/mL</th>
<th>Improvement on Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/M/59</td>
<td>CIU</td>
<td>7.1</td>
<td>434</td>
<td>Partial*</td>
</tr>
<tr>
<td>2/M/47</td>
<td>CU</td>
<td>0.5</td>
<td>176</td>
<td>No</td>
</tr>
<tr>
<td>3/M/57</td>
<td>CU</td>
<td>6.1</td>
<td>409</td>
<td>Complete</td>
</tr>
<tr>
<td>4/F/38</td>
<td>CIU</td>
<td>40.9</td>
<td>181</td>
<td>Complete*</td>
</tr>
<tr>
<td>5/F/60</td>
<td>CIU</td>
<td>16.3</td>
<td>168</td>
<td>Complete</td>
</tr>
<tr>
<td>6/F/15</td>
<td>CIU</td>
<td>1.7</td>
<td>44</td>
<td>Complete*</td>
</tr>
<tr>
<td>7/F/37</td>
<td>CIU</td>
<td>0.6</td>
<td>350</td>
<td>Partial*</td>
</tr>
<tr>
<td>8/F/17</td>
<td>CU</td>
<td>49.5</td>
<td>896</td>
<td>Complete*</td>
</tr>
<tr>
<td>9/F/43</td>
<td>CU</td>
<td>1.0</td>
<td>66</td>
<td>Partial*</td>
</tr>
<tr>
<td>10/F/74</td>
<td>CU</td>
<td>31.3</td>
<td>54</td>
<td>Partial</td>
</tr>
<tr>
<td>11/F/59</td>
<td>CU</td>
<td>12.4</td>
<td>44</td>
<td>Complete</td>
</tr>
<tr>
<td>12/M/71</td>
<td>CU</td>
<td>8.4</td>
<td>307</td>
<td>Complete</td>
</tr>
<tr>
<td>13/M/10</td>
<td>CU</td>
<td>22.2</td>
<td>172</td>
<td>Complete</td>
</tr>
<tr>
<td>14/F/65</td>
<td>CIU</td>
<td>1.2</td>
<td>76</td>
<td>Complete*</td>
</tr>
<tr>
<td>15/M/55</td>
<td>CIU</td>
<td>4.4</td>
<td>353</td>
<td>Partial</td>
</tr>
</tbody>
</table>

Abbreviations: α-gal, galactose-α-1,3-galactose; CIU, chronic idiopathic urticaria; CU, chronic urticaria.

* Patient continued to be treated for CIU.

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injuries from sharps in the United States are incurred by resident physicians, and it has been previously suggested that dermatology residents are at a particularly high risk of such injuries.2,4,5 There is currently a lack of published information concerning resident-specific data (aside from simple injury frequencies), data on how injuries from sharps vary between specialties (aside from total injury frequencies), and nonsurvey-based data.2,4-6 The goal of this study is to assess whether the nature of injuries from sharps among University of Oklahoma Health Sciences Center dermatology residents is demonstrably different compared with injuries from sharps among residents in other medical and surgical specialties.

Methods | Records for this study, conducted from January 29 to May 15, 2018, were based on optional incident reports that residents are asked to complete after sustaining injuries from sharps. Data were stratified by type of specialty (dermatology, nondermatology medical specialty, or nondermatology surgical specialty), injury situation (eg, passing instruments between employees), and type of device involved. Specialties within the nondermatology medical category were cardiology, family medicine, neurology, nuclear medicine, pathology, pediatrics, pulmonology, radiology, and rheumatology. Surgical specialties included anesthesia, dentistry, general surgery, neurosurgery, obstetrics and gynecology, ophthalmology, otorhinolaryngology, orthopedic surgery, plastic surgery, and urology. Reports for which the specialty was unclear were excluded from analysis. This study was approved by the University of Oklahoma Institutional Review Board. Deidentified University of Oklahoma Health Sciences Center records of injuries from sharps were obtained from the environmental health and safety office.

Group statistics are presented as rates expressed as percentage of total injuries within a specialty type (number of injuries of interest/total number of injuries in group). Rates were compared between and among groups using χ² tests or Fisher exact test if injury frequencies were low (expected injuries <5). All P values were from 2-sided tests and results were deemed statistically significant at P < .05.

Figure 1. Proportion of Injuries by Device

Figure 2: Proportion of Injuries by Context

Error bars indicate 95% CIs.

a Significant difference from the combined nondermatology medical and surgical values.
b Significant difference from the dermatology value.
Results | Incident report data were available for the years 2010 to 2017. A total of 464 injuries were recorded by University of Oklahoma Health Sciences Center residents. Of these 464 injuries, 19 were incurred by dermatology residents, 122 were incurred by nondermatology medical residents, 322 were incurred by nondermatology surgical residents, and 1 was excluded from the comparative analysis owing to our inability to determine the relevant residency department. Analytical results are illustrated in Figure 1 and Figure 2.

Statistically significant findings included the increased mean (95% CI) proportion of suture-needle injuries among dermatology compared with nondermatology specialties (63.2% [95% CI, 41.5%-84.9%] vs 40.1% [95% CI, 36.0%-44.5%]; \(P = .045\)) and compared with nondermatology medical specialties (63.2% [95% CI, 41.5%-84.9%] vs 21.3% [95% CI, 14.0%-28.6%]; \(P \leq .001\)), as well as the decreased proportion of hollow-needle and bladed instrument injuries among dermatology compared with nondermatology medical specialties (hollow needles, 15.8% [95% CI, 0.0%-32.2%] vs 39.3% [95% CI, 30.6%-48.0%]; \(P = .047\); and bladed instruments, 5.3% [95% CI, 0.0%-15.3%] vs 32.0% [95% CI, 23.7%-40.3%]; \(P = .02\)). No significant differences were seen for proportion of electrical instrument injuries or contextual factors leading to injury (eg, recapping needles).

Discussion | Further research is necessary to confirm the external validity of this single-institution study. In addition, the data source for this study, optional incident reports, represents a potential weakness of nonresponse and voluntary response bias. Because records were unidentified prior to analysis, confounding factors, such as residents with repeated injuries, could not be evaluated.

Previous studies have suggested that resident physicians, and particularly dermatology residents, may be at increased risk of injuries from sharps.1-4,5 Our study reports the largest nonsurvey-based analysis of injuries from sharps among residents to date, to our knowledge. We demonstrated that dermatology residents, in comparison with residents of other medical specialties, incur a higher proportion of injuries involving suture needles and a lower proportion of injuries involving bladed instruments or hollow needles. This finding provides nonsurvey-based support for the recommendation of future research on injuries from sharps and education being targeted specifically toward prevention of suture-needle injuries.

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OBSERVATION

Dupilumab Treatment for Generalized Prurigo Nodularis

Generalized prurigo nodularis is a severe and widespread morphologic manifestation of chronic pruritus.1 This condition is challenging to treat and results in a high burden of disease.1 We examined the effectiveness of the interleukin (IL) 4 receptor a inhibitor dupilumab as a novel treatment option for generalized prurigo nodularis.

Methods | In this case series, 3 patients with generalized prurigo nodularis seen at the dermatology practice of a hospital-based tertiary referral center were evaluated and treated subcutaneously with 600 mg of dupilumab followed by 300 mg every other week. Use of all concomitant topical and systemic medications was continued. Clinical response and adverse events were monitored throughout the initial 12 weeks of treatment. Because no standardized rating scale for prurigo nodularis exists, clinical response was evaluated by the size and number of prurigo lesions and patients’ reported symptoms of pruritus as measured by the pruritus numerical rating scale (score range of 0 to 10, with higher numbers indicating worse itch).1 Institutional review board approval was not necessary for the reporting of this case series according to the University of California, San Francisco Institutional Review Board. Patients provided verbal consent before initiation of treatment. All data were deidentified.