Correspondence

Hazards of tubular gauze finger dressings

To the Editor,

Tubular gauze finger dressing is a commonly applied wound covering (Fig. 1). The total number of applications per year is unknown. In many emergency and clinic situations, its application is delegated to the more junior clinic staff. How much training with this material the people using it have is another unknown. Several complications resulting from the use of this material seen on referral prompted the author to survey the participants of the American Society of Surgery of the Hand’s Listserv, as to the number of such complications they have seen [1,2]. This paper reports the results of that survey.

The key stimulus for this survey was a query by an attorney representing a little girl who reportedly lost a finger as a complication of the improper use of tubular gauze dressing. Another physician, a member of this society, stated that an amputation as a complication of the use of this material was impossible. Was he right?

This study was by survey only. The American Society for Surgery of the Hand is the largest American professional society devoted to hand surgery. It has a total membership of 2790 members. Approximately 500 of these members regularly participate on its LISTSERVE, debating and discussing a broad range of subjects and cases. No one knows how much of the total American hand surgery caseload is seen by the membership of the society. There is also no way to know what percentage of the total existing complications is demonstrated by complications reported to this survey.

I submitted a survey to the ASSH Listserv and 75 physicians out of a list serve readership of more than 500, responded.

One third of respondents reported seeing some problem as the result of the use of tubular gauze.

Sixty-six percent of the positive responses reported the dressing was too tight.

The responding physicians, when asked about the category of personnel who applied the dressing reported:

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>8/26</td>
<td>33%</td>
</tr>
<tr>
<td>RN</td>
<td>2/26</td>
<td>7.7%</td>
</tr>
<tr>
<td>EMT</td>
<td>2/26</td>
<td>7.7%</td>
</tr>
<tr>
<td>Unknown</td>
<td>15/26</td>
<td>57.7%</td>
</tr>
</tbody>
</table>

The following complications were reported:

- Swelling only: 12/26
- Blisters burn-like changes: 18/26
- Depigmentation: 14/26
- Amputations: 15/26

*Some of the patients reported had more than one of these findings, which is why the events total more than 26.

This is a small number of complications from a product used hundreds of thousands of times, or more, a year. It represents the positive responses from a very small population of the total number of Hand Surgery providers. It is likely the total numbers of such complications is actually much higher.

Although the small sample size limits the value of this data, the take-home message remains the same. Tubular gauze can be used safely, but anyone using it should be made aware of its potential hazards (Figs. 2 and 3).

I encourage all users of this material to be careful in its use and no paramedical employee should be allowed to use it without instruction as to its safe use and potential hazards.

Although I personally have never seen an amputation as a result of the use of this material, I have seen two patients who...
had swelling, blisters, prolonged stiffness, and depigmentation from its use.

My local hospital ED, which saw 3 complications in a 1-year period from use of this material, has removed tubular gauze from its shelves as a safety precaution.

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References


Fig. 2 An example injury.

Fig. 3 Example injury used with permission from Donald Lalode, MD.