SLOVAK HONEYDEW HONEY FOR TREATMENT OF THE LOWER LEG ULCERS

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Introduction

Honey is a popular natural product that is extensively used in the treatment of a broad spectrum of injuries, in particular chronic wounds. However, not all honeys exhibit equal antimicrobial potency and only a few of them meet the criteria for clinical usage.

Slovak fir honeydew honey produced in Medar apiary (Bardejov) has a potential to be another medical-grade honey. It exhibits a strong antibacterial, anti-biofilm, immuno-modulatory and anti-inflammatory properties (reviewed in [1]). It has successfully been used for treatment of infected gluteofemoral fistulas [2] and as a prophylactic agent of endophthalmitis [3].

Aim

The aim of the study was to characterise a clinical efficacy of sterilised honeydew honey in the treatment of the lower leg ulcers in 15 patients. Furthermore, we evaluated honey acceptability to patients in terms of pain and overall patient satisfaction.

Methods and Procedures

A total of 15 cases of leg ulcers treated with sterilized 100% honeydew honey were examined. The honey dressings were changed after 1-3 days depending on wound exudation. Each wound was assessed at the least three times in a time period of 3, 6 and 9 weeks. A full wound assessment was conducted at various points in the study. In addition, all patients were asked to record their subjective feelings (e.g. pain level) and overall satisfaction. Patients characteristics are displayed in Table 1.

Table 2. Patient drop-out rate

<table>
<thead>
<tr>
<th>Reason</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing ulcer pain</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Deterioration in general health</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Deterioration in ulcer condition</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Death of patient</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Adverse events</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Results

Two of the 15 patients dropped out of the study due to increasing ulcer pain (Table 2). During the course of honey treatment the average total wound area of all patients decreased from 49 (4-132) to 21 (0-81) cm². Overall, tolerance of honey was very good after 6 weeks of treatment. In 80% of all assessments the results were positive; in 7% there was no change in tolerance; and in 13% there were complaints of poor tolerance (patients dropped out of the study).

Honey-induced process of wound healing was also photo-documented in some cases (Figure 1).

Conclusion

Taken together, honeydew honey is promising wound healing agent, represents an ideal inexpensive agent that meets all criteria to be therapeutically useful in treating chronic wounds.

References