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(A) Cultural adaptation and validation of Patient and Observer Scar Assessment Scale for Turkish use.

(B) Reliability and Validity of the Turkish Version of Patient and Observer Scar Assessment Scale in Patients with Burns.

We conducted the study at University Of Health Sciences Kartal Dr Lutfi Kırdar Education and Research Hospital, Burn and Wound Treatment Department within their Clinic Physiotherapist staff, and we interpreted the “observer” as one person meaning of POSAS concept, it may more than as an option as well. Assessments can be done with more than one observer. In our study, the scar was assessed by one observer in terms of financial and time constraints, critical patient monitoring and feasibility. Also this is an accepted method. Results of statistical analysis have been provided in the article [2].

The evaluation of POSAS was carried out as specified on the original scale [3,4].

Conflict of interest

The authors declared no conflict of interest with respect to the authorship and publication of this paper.

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Letter to the Editor

pH of a burn wound — what’s next?



A short comment on ‘pH of a burn wound’ by

H. Richards & S. Falder

Dear Sir,

We refer to the recent letter ‘pH of a burn wound’ by H. Richards and S. Falder [1] which we highly appreciated as it once more points to pH as an important biomarker in wound healing. The authors investigated pH changes after burns in children to evaluate the need for prolonged irrigation of the wound, which is performed to try and re-establish a “normal” pH. From their data they conclude, that— although indispensable as an initial procedure to remove chemical contamination and effect pain relief— prolonged irrigation will not return the pH of burned skin to that of unburned skin. Several former studies also reported an increased, more alkaline pH in wounds of up to 8.9 [2–4], in comparison to that of healthy skin which is supposed to range between 4.0 and 6.0 [5].

Additional to the question of prolonged irrigation, other clinical consequences of pH monitoring remain of special interest. Sharpe et al. were able to show a correlation between pH and wound-depth and observed a drop of pH as healing progressed [4]. Interestingly, Ono et al. describe a pH elevation prior to a clinically manifest wound infection [6], which again emphasizes the significance of the pH value in wounds and pH monitoring for objective clinical decision making.

In the aforementioned studies pH measurements were conducted by the use of non-sterile indicator strips [6] or devices with the need for further calibration [2,4]. Other technologies require additional electronic equipment to produce a valid statement [7].

We strongly suggest that pH sensing of critical wounds should be part of the standard of care. It should not interfere with physiological wound healing, thus be non-invasive, highly sensitive and with high spatial and temporal resolution.

Therefore, an optimal solution would be to integrate the wound pH sensor or indicator into a clinically used wound dressing, allowing to detect and monitor pH changes in the relevant range (e.g. 7–10). Developing such a composite wound dressing, which would ideally be semi-transparent, would

offer an easy way to visually monitor wounds without the need of dressing removal.

Since this matter is of significant importance, we have perceived the recent letter by Richards and Falder as particularly compelling. Actually, our group is currently engaged in a project to covalently link a pH indicator dye to a wound dressing and hope to be able to report on it in the near future.

Declarations of interest

None.

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Letter to the Editor

The ideal wound dressing — Beyond the ideal



A short comment on 'Properties of an ideal burn dressing: A survey of burn survivors and front-line burn healthcare providers' by T. Carta, J.P. Gawaziuk et al

Dear Sir,

We refer to the recently published article 'Properties of an ideal burn dressing: A survey of burn survivors and front-line burn healthcare providers' by Carta et al. [1]. This article is of great interest to everyone professionally involved in burn wound care, since everyone will have his or her own idea about the "perfect" wound dressing. Thus the aspect here, to include the ones having suffered from the consequences of burns, is a significant novel element in the pursuit of the ideal burn dressing. Interestingly, the perception of burn-victims of an 'ideal' burn dressing is in total concordance with the one of burn-care-providers as reported here and in a former study [2]; non-adhesive, antimicrobial and absorbent are the top three qualities such a dressing should come with. Similar properties have been determined by other workgroups dealing with wound dressings in general, including a Cochrane analysis reviewing burn dressings in the literature [3–5]. One aspect, which was found to be a minor criteria by Carta et al. was 'long-wearability' (seventh out of eight). This seems to be dependent on the type of wound investigated, as investigations considering burn wounds [2] and split-skin donor site wounds [6] delivered quite diverging answers to the question of frequency: the majority of surveyees favoured no dressing change until the wound has healed in split-skin donor site wounds, whereas the answer to the same question in burn wounds delivered a more heterogeneous pattern. Yet, close-meshed wound controls are necessary, especially in burn wounds due to uncertainties and different pathophysiology that are responsible for higher complication rates [7,8]. This enables an intervention as soon as the wound deteriorates.

Modern developments have brought up new-material dressings based on hydrogel or bacterial nanocellulose, that get quite close to fulfilling the desired requirements to represent the 'ideal' burn dressing [9–11]. Still numerous complications in wound healing are observed; the reasons apart from infections are still not fully elucidated. However, recent studies imply an association between healing progression and certain biomarkers, such as inflammatory mediators, pH, biofilm-forming or temperature [12–15].

Therefore, we would like to encourage further elaboration of wound dressings and propose an amendment to the properties of an ideal wound dressing: future smart wound dressings should be facilitating continuous monitoring of relevant wound parameters. A composite dressing, able to indicate such relevant criteria, could contribute to a more