Danish Translation and Validation of the International Skin Tear Advisory Panel Skin Tear Classification System

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Background
Skin tears are reported as painful acute wounds resulting from trauma, which have a high risk of transitioning to complex chronic wound. Skin tears are defined as “a wound caused by shear, friction, and/or blunt force resulting in separation of skin layers. A skin tear can be partial-thickness (separation of the epidermis from the dermis) or full-thickness (separation of both the epidermis and dermis from underlying structures)”.

As with all wound types, skin tears should be assessed and documented in a consistent manner, on a regular basis and according to healthcare setting practice and policies. Documentation of skin tears is important as a common descriptive language be used. Proper documentation is vital component in understanding the extent and impact of skin tears. In accordance with wound care principles, skin tear documentation requires a systematic framework for assessment, treatment, and evaluation of outcomes.

The need for a universally accepted definition, classification system and a comprehensive international strategy addressing all aspects of skin tear management prompted the establishment of the International Skin Tear Advisory Panel (ISTAP). ISTAP published a definition skin tears and 12 consensus statements. ISTAP acknowledged that in addition to a common definition for skin tears, a universal language for describing and documenting skin tears was needed.

In response to this need, ISTAP developed the ISTAP Skin Tear Classification System for Skin Tears (Figure 1). The Classification System has been validated and widely utilized to describe and document skin tears. The classification system was developed and validated in the English language.

Figure 1

Type 1: No skin loss
Type 2: Partial flap loss
Type 3: Total flap loss

Linear or flap tear that can be repositioned to cover the wound bed
Partial flap loss that cannot be repositioned to cover the wound bed
Total flap loss exposing entire wound bed

A Hospital located in Copenhagen, Denmark, recognized the need for the use of a universally accepted language for describing and documenting skin tears. Prior to the implementation of the ISTAP Skin Tear Classification System, there was a need to translate and validate the classification system into Danish. Translation into Danish was in the dissemination of the ISTAP classification system and global discussion of these complex wounds. Confidentiality and anonymity were guaranteed to the participants before entering the study. The study was conducted in compliance with the ethical principles derived from the Declaration of Helsinki. Ethical approval was also received from the hospital and primary care ethics committees.

Objective
The aim of this study was to translate, validate and establish reliability of the International Skin Tear classification system into Danish.

Methods
Phase 1: Translation of the Classification System into Danish
The ISTAP Skin Tear Classification System was translated into Danish, using the translation ± back translation method described by the principles of good practice for the translation process for patient-reported outcomes.

Figure 2

Hudlæsning med hudlæg (skin tear) Classification: - inddeling

Type 1: Ingen hudlæg
Type 2: Delvist tab af hudlæg
Type 3: Fuldstændig tab af hudlæg

Linear hudlæsning eller skred af hudlæg, som kan genplaceres, så den dansk særer.
Delvis tab af hudlæg, som ikke kan genplaceres, så den dækkere særer.
Fuldstændigt tab af hudlæg, hvore hele særet er blotet.

Phase 2: Validation of the translated (Danish) Classification System
The Danish group sought to replicate and validate the ISTAP Skin Tear Classification System with 270 non-wound specialists at a Danish hospital and primary health care setting.

Table 1 Sample demographics, n=270 (%)

<table>
<thead>
<tr>
<th>Group</th>
<th>Primary Health Care</th>
<th>Secondary Health Care</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN</td>
<td>65 (27,0)</td>
<td>176 (73,0)</td>
<td>241 (89,2)</td>
</tr>
<tr>
<td>Non-RN</td>
<td>19 (65,5)</td>
<td>10 (34,5)</td>
<td>29 (10,8)</td>
</tr>
<tr>
<td>Total</td>
<td>84 (31,0)</td>
<td>186 (69,0)</td>
<td>270</td>
</tr>
</tbody>
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Phase 3: Validation of the translated (Danish) Classification System
Validation of the translated classification system for skin tears. Agreement was calculated using Fleiss’ K value.

Table 2 Statistical Analysis

<table>
<thead>
<tr>
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<th>Fleiss K</th>
<th>Strength of Agreement</th>
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<tbody>
<tr>
<td>Overall (n=270)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN (n=241)</td>
<td>0.460</td>
<td>Moderate</td>
</tr>
<tr>
<td>Non-RN (n=29)</td>
<td>0.443</td>
<td>Moderate</td>
</tr>
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</table>

Discussion
The results from the validation study demonstrated moderate inter-rater reliability for the licensed nurses and social and health care assistants using the Danish translation of the ISTAP classification system. These results closely mirrored those found in the original ISTAP study (moderate agreement among non-wound care specialty health care professionals according to the Landis and Koch interpretation). The expert ISTAP group demonstrated a higher level of agreement than did the healthcare professional groups both in the original study and in the Danish translation study. These differences were attributed to the level of expertise and familiarity with the classification system, although further investigation of this would be required to explain this finding. It is proposed that if individual were given access to the classification system as a reference, the levels of agreement would be even greater. The high level of agreement would appear to be a testament to the simplicity and ease of use of the classification system.

The primary objective of the ISTAP was to develop and validate a widely accepted Skin Tear Classification System and establish a common language for the documentation of Skin Tears. Such developments are paramount to future research related to the prediction, prevention, assessment, and treatment of these unique, yet understood, wounds. This study was successful in its aim to translate and validate the classification system into Danish and to aid in the global recognition of skin tears as a unique wound etiology.

Conclusion
The expert panel established the ISTAP Skin Tear Classification System with the goal of raising the global healthcare community’s awareness of Skin Tears. The Danish translation of this ISTAP classification system supports the earlier ISTAP study and further validates the classifications system. The Danish translation of the classification system is vital to the promotion of skin tears in both research and the clinical settings in Denmark.

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Conflict of interest
There were no external sources of funding for this study. The authors have no conflict of interest to declare with regards to the manuscript or in the content.

References

Table 1 Sample demographics, n=270 (%)

Table 2 Statistical Analysis

Overall (n=270) 0.460 Moderate
RN (n=241) 0.464 Moderate
Non-RN (n=29) 0.443 Moderate

5.6 (5,6)