

#### DECISION-MAKING ALGORITHM FOR SKIN TEAR TREATMENT: TRANSLATION AND CROSS-CULTURAL **ADAPTATION**

#### ALGORITMO DE DECISIÓN PARA EL TRATAMIENTO DE SKIN TEAR: TRADUCCIÓN Y ADAPTACIÓN TRANSCULTURAL

#### ALGORITMO DECISÓRIO PARA TRATAMENTO DE SKIN TEAR: TRADUÇÃO E ADAPTAÇÃO TRANSCULTURAL

Camyle de Melo dos Santos<sup>1</sup>, **Beatriz Guitton Renaud Baptista** de Oliveira<sup>2</sup> Kimberly LeBlanc<sup>3</sup>, Priscilla Alfradique de Souza<sup>4</sup>

<sup>1</sup>Enfermeira, Mestre, Universidade Federal Fluminense, Niterói (RJ), Brazil. ORCID: https://orcid.org/0000-0002-5560-3226 <sup>2</sup>Enfermeira, Professora Titular,

Universidade Federal Fluminense, Niterói (RJ), Brazil. ORCID: https://orcid.org/0000-0001-7494-7457

<sup>3</sup>Western University, School of Physical Therapy, Advanced Health Care Practice Program, Ontario, Canadá. ORCID: https://orcid.org/0000-0001-5003-686X <sup>4</sup>Professora Adjunta do

Departamento de Enfermagem Médico-Cirúrgica (DEMC) da Escola de Enfermagem Alfredo Pinto (EEAP), Universidade Federal do Estado do Rio de Janeiro (Unirio), Rio de Janeiro (RJ), Brazil. ORCID: https://orcid.org/0000-0002-4625-755223

#### **Corresponding Author** Camyle de Melo dos Santos

R. Dr. Celestino, 74 - Centro, Niterói - RJ, Brazil. 24020-091. Telefone: +55(21)964906856. E-mail: mylysantos@gmail.com.

Submission: 22-02-2024 Approval: 25-02-2025

#### ABSTRACT

Introduction: The Skin Tear Decision Algorithm, developed by the International Skin Tear Advisory Panel (ISTAP) in 2013, standardizes the prevention and treatment of skin tears through a systematic approach. Objective: To translate and cross-culturally adapt the Skin Tear Decision Algorithm into Brazilian Portuguese. Method: Methodological research conducted in five stages: (1) initial translation; (2) synthesis of translations; (3) back-translation; (4) expert committee, composed of 28 professionals; and (5) pre-test with 31 clinical nurses. The expert committee analysis included calculating the agreement rate and content validity index. In the pre-test, feasibility was assessed using the agreement rate. Results: The algorithm encompasses essential care in managing skin tears, including wound assessment, bleeding control, cleansing, approximation of wound edges, classification, and definition of therapeutic goals. The expert committee evaluation showed satisfactory results, with an agreement rate exceeding 80% and a content validity index above 0.80. In the pre-test, the translated version achieved a 100% agreement rate, a content validity index of 1.00, and a Kappa index of 0.846. Conclusion: The instrument SKIN TEAR: decision algorithm was considered feasible and feasible, aiming to significantly assist in the process of building a structured care program including the construction of prevention and treatment protocols for this type of injury contributing to the quality of health services. Keywords: Algorithms; Wounds and Injuries; Friction; Skin; Nursing.

#### RESUMEN

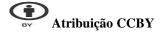
Introducción: El Skin Tear Decision Algorithm, desarrollado por el International Skin Tear Advisory Panel (ISTAP) en 2013, estandariza la prevención y el tratamiento de las skin tears mediante un enfoque sistemático. Objetivo: Traducir y adaptar transculturalmente el Skin Tear Decision Algorithm al portugués de Brasil. Método: Investigación metodológica realizada en cinco etapas: (1) traducción inicial; (2) síntesis de las traducciones; (3) retrotraducción; (4) comité de expertos, compuesto por 28 profesionales; y (5) prueba piloto con 31 enfermeros asistenciales. El análisis del comité de expertos incluyó el cálculo de la tasa de concordancia y el índice de validez de contenido. En la prueba piloto, la viabilidad fue evaluada mediante la tasa de concordancia. Resultados: El algoritmo abarca cuidados esenciales en el manejo de las skin tears, incluyendo la evaluación de la lesión, control del sangrado, limpieza, aproximación de los bordes, clasificación y definición de los objetivos terapéuticos. La evaluación del comité de expertos mostró resultados satisfactorios, con una tasa de concordancia superior al 80% y un índice de validez de contenido superior a 0.80. En la prueba piloto, la versión traducida obtuvo una tasa de concordancia del 100%, un índice de validez de contenido de 1.00 y un índice Kappa de 0.846. Conclusión: El instrumento SKIN TEAR: algoritmo de decisión se consideró factible y factible, con el objetivo de ayudar significativamente en el proceso de construir un programa de atención estructurado que incluya la construcción de prevención y tratamiento protocolos para este tipo de lesiones contribuyendo a la calidad de los servicios de salud.

Palabras clave: Algoritmos; Heridas y Lesiones; Fricción; Piel; Enfermería.

#### RESUMO

Introdução: O Skin Tear Decision Algorithm, desenvolvido pelo International Skin Tear Advisory Panel (ISTAP) em 2013, padroniza a prevenção e o tratamento de skin tears por meio de uma abordagem sistemática. Objetivo: Traduzir e adaptar transculturalmente o Skin Tear Decision Algorithm para a língua portuguesa do Brasil. Método: Pesquisa metodológica conduzida em cinco etapas: (1) tradução inicial; (2) síntese das traduções; (3) retrotradução; (4) comitê de juízes, composto por 28 profissionais; e (5) pré-teste com 31 enfermeiros assistenciais. A análise do comitê de juízes incluiu o cálculo da taxa de concordância e do índice de validade de conteúdo. No pré-teste, a praticabilidade foi avaliada por meio da taxa de concordância. Resultados: O algoritmo abrange cuidados essenciais no manejo de skin tears, incluindo avaliação da lesão, controle do sangramento, limpeza, aproximação das bordas, classificação e definição das metas terapêuticas. A avaliação pelo comitê de juízes indicou resultados satisfatórios, com taxa de concordância superior a 80% e índice de validade de conteúdo acima de 0,80. No pré-teste, a versão traduzida apresentou taxa de concordância de 100%, índice de validade de conteúdo de 1,00 e índice Kappa de 0,846. **Conclusão**: O instrumento SKIN TEAR: algoritmo decisório foi considerado factível e exequível, tendo como finalidade auxiliar significativamente no processo de construção de um programa de cuidados estruturado contemplando a construção de protocolos de prevenção e tratamento para esse tipo de lesão contribuindo para a qualidade dos serviços de saúde.

Palavras-chave: Algoritmos; Ferimentos e Lesões; Fricção; Pele; Enfermagem.





#### INTRODUCTION

Skin tear is a traumatic wound caused by mechanical forces, including adhesive removal, which results in the separation of the epidermis and dermis from the underlying structures, without extending into the subcutaneous layer. This skin lesion is associated with fragile and thin skin, occurring mainly on the extremities of elderly individuals, especially those who are debilitated and dependent with compromised mobility and nutrition<sup>(1)</sup>. In elderly individuals, the fragility resulting from changes in the skin structure may contribute to the vulnerability of these individuals and to the occurrence of this lesion(2). Although it is important to emphasize that skin fragility is associated with aging, other clinical conditions such as highly complex patients and specific risk groups such as oncology may present skin fragility and its  $consequences^{(3)}$ .

Skin Tear is considered one of the types of Skin Injuries related to the use of medical adhesives — Medical Adhesive-Related Skin Injury (MARSI). In a recent publication, it was found that the incidence of MARSI in Intensive Care Unit (ICU) patients was relatively high. When compared to other types of MARSI, skin tear had an incidence of 17.9%, being the third type in percentage of occurrence, only lower than skin (epidermal) stripping — Skin denudation (35.9%) — and blisters — Tension injury or "blister" (25.6%)<sup>(4)</sup>. In another study, evaluating a very common condition in highly complex patients, the prevalence and risk factors associated with MARSI in skin adjacent to the peripherally inserted central catheter (PICC) in cancer patients were analyzed. The prevalence of MARSI was significant at 125 (29.83%) in 419 cancer patients hospitalized in China, including skin denudation (73, 17.42%), contact dermatitis (39, 9.31%), maceration — skin damage associated with moisture — (11, 2.63%) and folliculitis (2, 0.48%)<sup>(5)</sup>.

Although professionals identify the occurrence of this skin lesion, they still have difficulty in making a specific diagnosis and using the correct nomenclature. In some cases, these lesions are considered "confounding lesions", related to the etiological factors of friction and shear and are wrongly diagnosed and treated as "pressure injuries" <sup>(6)</sup>. Another relevant factor is the lack of implementation of validated instruments for managing the care of this lesion.

The Skin Tear Decision Algorithm presented in October 2013 by the International Skin Tear Advisory Panel: A Tool Kit to Aid in the Prevention, Assessment, and Treatment of Skin Tears Using a Simplified Classification System can assist in the process of preventing and treating skin tears. The algorithm was developed to allow a universal language for decision-making in the treatment of this type of lesion and is part of a set of tools — "tool kit" —



called ISTAP (International Skin Tear Advisory Panel), which is based on the premise that a systematic approach should be implemented<sup>(7)</sup>.

The objective of this study was to translate and cross-culturally adapt the Skin Tear Decision Algorithm into Brazilian Portuguese.

## **METHODS**

This is a methodological study, the translation of which was authorized by the main author of the instrument, Dr. Kimberly LeBlanc. The study was developed in compliance with the principles of ethics in research involving human beings, and was approved by a Research Ethics Committee, according to Opinion No. 3,192,292 and Certificate of Presentation for Ethical Assessment No. 01371918.3.0000.5243.

The research was developed in five stages <sup>(8)</sup>: 1) Initial translation; 2) Synthesis of Translations; 3) Back-translation; 4) Committee of Judges; and 5) Pre-test.

In stage 1, the original version of the Skin Tear Decision Algorithm was translated into Portuguese by two bilingual translators independently, whose native language was Brazilian Portuguese and who were fluent in English, generating Translation 1 (T1) and Translation 2 (T2). In stage 2, versions T1 and T2 were compared.

In stage 3, the synthesis version T3 was back-translated from Brazilian Portuguese back into English by two independent bilingual translators who were unfamiliar with the original instrument. After the back-translations, the two versions RT1 and RT2 were compared to create a synthesis (RT3).

In stage 4, a Committee of Judges was formed, consisting of twenty-eight nurses who met to evaluate the consensual version in Portuguese and other versions, in order to achieve cross-cultural equivalence of the translated instrument.

The Committee's role is to compile and consolidate all versions and components of the instrument, including the original and translated versions, and subsequently develop the pre-final version for field testing. The Committee reviewed all translated versions and reached a on the differences identified. consensus Approval of the changes occurred when 70% of the Committee members agreed with the proposal. At the end of the evaluation by the committee, the authors analyzed the suggestions offered and proposed the pre-final version of the instrument in Portuguese. The Committee of Judges was formed by 28 nurses, 27 (96.43%) of whom were female, 18 (64.29%) aged between 20 and 40 years, and 10 (35.71%) aged between 11 and 20 years since graduation. Regarding (57.14%)professional training, sixteen participants had a master's degree and specialization in wounds and/or related areas; seven (25%) had a doctorate, master's degree and specialization in wounds and/or related areas; and five (17.86%) had a specialization in wounds and/or related areas. Regarding professional

Informed

prepared.

Characterization

considered them pertinent.

To

experience, 21 judges (75%) had worked in the

area of wounds, one judge (3.57%) in wounds

and translation, five (17.86%) in wounds and

validation, and one judge (3.57%) in translation

and validation. In stage 5, the last phase of the

adaptation process, a pre-test was performed

using the pre-final version in order to verify the

psychometric properties of the instrument. This

stage was carried out in a university hospital in

Brazil with 31 clinical nurses who met the

following inclusion criteria: nurses from clinics

and intensive care units. The exclusion criterion

was related to nurses who did not provide direct

care to patients in these sectors. To evaluate the

translated version, the nurses received the

Form.

Evaluation Form, Patient Characterization Form

and the modified Practicality Instrument used by

Alves et al.<sup>(9)</sup>. Participants were encouraged to

provide suggestions for improvements when they

analyze

agreement rate of the practicality instrument, the

Agreement Rate (IR) and the Content Validity

Index (CVI) were calculated. All items presented

an agreement rate greater than 80% and a

Content Validity Index greater than 0.80,

meeting the recommendations in the literature,

and there was no need to return to the translation

After the pre-test, the final version was

the

Form,

Translated

Professional

interobserver

Item

Consent

REVISTA ENFERMAGEM ATUAL IN DERME

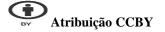
RESULTS

The translated versions (T1 and T2) were compared and discrepancies resolved by consensus to define the synthesis version to be used in the next phase of back-translation.

The back-translations were compatible in almost all items, with one discrepancy in the item "Approximate wound edges", where the translators' understanding resulted in "Approximating the wound edges" and "Closing the edges of the wound", with "closing" expressing an understanding of closing and "approximating" of approximation, which actually occurs in this stage of the algorithm. Therefore, "aproximar" was defined as more appropriate.

Some changes and/or additions to the synthesis version and components of the prefinal version of the instrument were made in order to meet the objective of cross-cultural adaptation, such as: 1) changing the term "wound" to "lesion"; 2) adding the article "o" in — Controlar o sangue; 3) change from "local conditions" to "aspect" defined by "Treatment options according to the appearance of the lesion"; 4) addition of the term "flap", with use defined as "flap/flap", considering a context in which both terms are used; 5) change from "friction" to "rupture" after consensus defined by "Linear or Flap/Flap Rupture that can be repositioned to cover the lesion bed".

In the item "Skin Tears", the literal translation was initially considered as "skin



and/or back-translation stages.

4



tears". However, the translation "lesões por friction" (lesions by friction) was considered <sup>(10)</sup>; however, due to the lack of regular use of the term and considering that the cause is not only friction, the judges decided to keep the term in English — Skin Tear.

According to the Committee of Judges, the items evaluated presented an agreement rate

greater than 80% and a Content Validity Index greater than 0.80, demonstrating high reliability.

## Pre-test

In this study, 31 clinical nurses composed the pre-test sample for evaluation of the translated items, according to the results presented in Table 1.

## Table 1 – Evaluation of Translated Items (N=31), Niterói-RJ, 2018

Translated items	Totally	Partially	Indeed agreed	Totally agree
	disagree	disagree		
Skin tear:	3 (9,68%)	7 (22,58%)	6 (19,35%)	15 (48,39%)
Decision algorithm				
Skin tears	2 (6,45%)	9 (29,03%)	4 (12,90%)	16 (51,62%)
Control Bleeding				31 (100%)
Classify (Measure and Document)				31 (100%)
Assessment				31 (100%)
Cleaning				31 (100%)
Approximation of the edges of the lesion			1 (3,22%)	30 (96,78%)
Treatment goals		1 (3,22%)		30 (96,78%)
- Treat the cause				31 (100%)
- Implement Prevention Protocol				
- Keep the wound bed moist				31 (100%)
- Avoid trauma				
- Protect the periwound skin				
- Manage exudate			1 (3,22%)	30 (96,78%)
- Avoid Infection				
- Control pain				
Treatment options according to the appearance		1 (3,22%)		30 (96,78%)
of the lesion				
Type 1: No skin loss		1 (3,22%)		30 (96,78%)
Type 2: Partial flap loss		2 (6,45%)	9 (29,03%)	20 (64,52%)
Type 3: Total flap loss		2 (6,45%)	9 (29,03%)	20 (64,52%)

https://doi.org/10.31011/reaid-2025-v.99-n.1-art.2499 Rev Enferm Atual In Derme 2025;99(1): e025036

5

Atribuição CCBY

ORIGINAL ARTICLE	I		
ISTAP Skin Tear Classification System	2 (6,45%)	5 (16,13%)	24 (77,42%)
Type 1: No skin loss	3 (9,68%)	10 (32,26%)	18 (58,06%)
Linear or Flap Tear that can be repositioned to			
cover the wound bed			
Type 2: Partial flap loss	3 (9,68%)	10 (32,26%)	18 (58,06%)
Partial flap loss that cannot be repositioned to			
cover the wound bed			
Type 3: Total flap loss	1 (3,22%)	10 (32,26%)	20 (64,52%)
Total flap loss completely exposing the wound			
bed			
Source: Santos; Oliveira, 2018.			

Practicality Instrument	disagree, I partially disagree, I have no opinion, I	
Table 2 presents the results of the	partially agree or I totally agree). It can be seen	
practicality instrument, in which nurses	that there was no disagreement or lack of opinion	
evaluated four items using five options (I totally	on the items evaluated.	

# Table 2 – Practicality Instrument (N=31), Niterói-RJ, 2018

Interviewees' opinions	Partially agree	Totally agree
I found it easy to understand the algorithm's care		31 (100%)
I found it easy to understand the algorithm's care sequence	9 (29,03%)	22 (70,97%)
The algorithm will contribute to the care of patients with Skin Tears		31 (100%)
I found the algorithm to be a facilitator for the treatment of Skin tears	1 (3,22%)	30 (96,78%)

Source: Santos; Oliveira, 2018.

After compiling these data, the Agreement Rate (CR) was 100%, the Content Validity Index (CVI) was 1.00, representing total agreement, and the Kappa Index showed the result K=0.846 and, therefore, a perfect agreement index, according to Fleiss' Kappa. Ten (32.26%) nurses said they "partially agree" and suggested the following changes or adjustments in the pre-version: changing "Treatment options according to the appearance of the lesion" to "Classification of the lesion"; enumerating the steps of care; changing

REVISTA ENFERMAGEM ATUAL

algorithm to a more common word in care; changing the sequence of care, starting with the treatment goals; placing the item "Control bleeding" before the item "Cleaning"; changing the term "Flap/Flap"; relating the last box (Treatment options according to the appearance of the lesion) to the item "Classify – Measure and document"; list the treatment goals starting with "pain control"; add the dressings after the classification; title suggestion: "Classification or Classification Algorithm" because it does not identify decision-making; describe the term skin tear in English and Portuguese simultaneously.

The suggestions for changes that emerged in the test of the translated version were analyzed by the authors. After the pre-test, based on the observations, the final version was prepared and will be presented in Figure 1.

#### DISCUSSION

Highly complex patients depend on central venous access devices to perform concomitantly with treatment and. this indication, most have multiple comorbidities, including renal failure, nutritional deficiencies, hematologic disorders, or cancer. Such conditions can compromise the maintenance of skin integrity in this scenario, specifically the skin around the Central Venous Catheter (CVC) insertion site, resulting in an increased likelihood of damage during CVC management. Catheterassociated skin injury (CASI) manifests in the

area adjacent to the insertion site through the occurrence of drainage, erythema, and/or other skin manifestations, including, but not limited to, vesicles, blisters, erosion, or tears that persist for 30 minutes or more after dressing removal <sup>(11)</sup>. In order to contribute to better identification and diagnosis of vascular access-associated skin impairment (CASI), guide clinical decisionmaking and treatment of skin lesions, and generate clinician confidence in managing CASI, a panel of experts developed an algorithm based on 3 domains: assessment, skin protection, and (12) patient comfort Correct selection. stabilization, regular assessments of the vascular access site, and recording of preventive care and therapeutic conduct include actions to mitigate the occurrence and/or impact of this type of injury<sup>(13)</sup>.

The care plan, both in primary prevention and treatment, of this type of injury must also include ensuring a safe environment in order to reduce the risk of skin tears and other injuries, as well as the impact on skin integrity (14,15)

Evaluating a wound is complex and can generate different interpretations due to its diversity in relation to nature, shape, and location, perception of the nursing professional, as well as the varying levels of knowledge existing about this practice <sup>(16)</sup>. The use of instruments (protocols, manuals, booklets, pamphlets and algorithms) has been one of the strategies to equip and guide nurses in wound

REVISTA ENFERMAGEM ATUAL IN DERME

assessment and also to enable more reliable nursing records and interventions. Algorithms in the health area have been developed to assist professionals in decision-making, both in preventive and therapeutic settings. These should be based on scientific evidence <sup>(17)</sup>.

After evaluation and discussion by the Committee of Judges, it was decided to maintain the term Skin Tear without translation, which is most commonly used by health professionals, in order to rescue basic concepts and characterize it universally so that we can advance in the dissemination of the term that faithfully portrays the characteristics of the injury and awakens knowledge about the subject, corroborating more assertive actions regarding identification, diagnosis and intervention.

## **Translation Stages**

In order to reach consensus at this stage, the construction of the summary version was based on two pillars: better appropriation to national practice and semantic and idiomatic value.

The back-translations were compatible in almost all items, with divergence only in the item "Approximate wound edges", in which one of the translators translated it as "Approximating the wound edges" and another as "Closing the edges of the wound". In the consensus meeting, understanding that the algorithm recommends that at this point the edges of the wound be approximated, approximate was chosen <sup>(7)</sup>.

#### **Stages of Cross-Cultural Adaptation**

In the Pre-test, the results confirm the judges' observations, in which nurses have difficulty identifying the injury as skin tears, sometimes calling it a "pressure injury" and not correlating it with the nationally validated nomenclature "friction injury".

## **Evaluation of Translated Items**

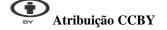
In twelve items that make up the algorithm structure, the agreement was higher than 70%, demonstrating a greater proximity to the usual language used in care, which directly contributes to the ease of understanding and implementation of the instrument.

In the other items, there was an agreement of 21.93% in replacing the term "flap" and 31.81% in replacing "skin", as a suggestion to change the terms "flap/flap". After consideration, the judges decided to use both terms, flap/flap.

In Skin Tears, most of the suggestions (41.93%) refer to changing the English term to friction injury (19.35%) or fragility (22.58%), however, the participants did not refer to this suggestion as mandatory, and were open to new knowledge and adaptation to the correct nomenclature. Although skin fragility is a predisposing factor to the condition of this lesion, it does not represent its etiology, thus deciding to maintain the term skin tear <sup>(1)</sup>.

Only one of the domains evaluated — Skin Tear: Decision-making algorithm showed 48.39% agreement with suggestions to

8



change the term "decision-making algorithm" to protocol, skin tear conduct protocol, flowchart, treatment protocol and step-by-step, with protocol (32.26%) and flowchart (19.35%) standing out. Protocols are recommendations developed systematically to contribute to the management of a health problem, in a specific clinical circumstance, based on scientific evidence, preferably of strong recommendation. Protocols are important updating tools in the health area and are used to minimize the possibility of inappropriate variation in clinical practice <sup>(18)</sup>. However, algorithms are simple, straightforward and easily accessible instruments that provide a complete view of the care process and are like maps, serving as a guide for decision-making, especially when these are complex <sup>(1)</sup>.

Other terms were suggested, but with less expression. In the domain Type 1: No skin loss – Linear or Flap/Patch Rupture that can be repositioned to cover the wound bed, the suggestion to include the term "totally" in the description of this item stands out, which would result in the following description: "Type 1: No skin loss – Linear or Flap/Patch Rupture that when repositioned completely covers the wound bed". And, in item Type 2: Partial loss of the flap/flap – Partial loss of the flap/flap that cannot be repositioned to cover the lesion bed, the suggestion to include the term "partially" in the description of this classification stands out,



resulting in a description that concerns "Type 2: Partial loss of the flap/flap – Partial loss of the flap/flap that when repositioned PARTIALLY covers the lesion bed".

It is noteworthy that despite the predominance, the suggestions did not reach 70% agreement that would reinforce the change in the version presented. However, in discussion, the authors accepted the suggestion to insert the terms TOTALLY and PARTIALLY, in the last two items of the instrument, respectively.

#### **Practicality Instrument**

Regarding the assessment by nurses, in which the practicality instrument was used, the Agreement Rate (CR) and Content Validity Index (CVI) showed total agreement, demonstrating that the instrument was considered feasible and feasible, and its purpose is to facilitate understanding in skin tear care.

The sample of evaluators proved to be qualified and specialized. Some nurses reported that after evaluating the instrument they gained more knowledge about the terminology of the injury and correct conduct. Other evaluators suggested enumerating the care steps, changing the order of the sequence, inserting the treatment goals at the beginning of the algorithm preceding the actions, indicating recommended dressings according to the classification, relating the item "Classification" with "Classify – Measure and document" and enumerating the treatment goals starting with pain control.

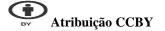
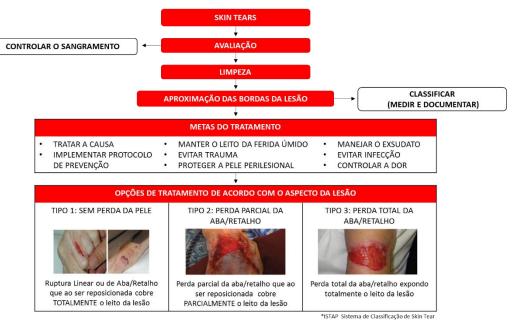




Figure 1 – Final Version of the SKIN TEAR DECISION ALGORITHM Instrument in Portuguese,

## Niterói-RJ, 2018.

SKIN TEAR: ALGORITMO DECISÓRIO



Source: Santos CMS, Oliveira BGRB. Decision-making algorithm for the treatment of skin tears: translation and cross-cultural adaptation [dissertation]. Niterói (RJ): Universidade Federal Fluminense; 2018.

# CONCLUSION

The study achieved the proposed objective of translating and cross-culturally adapting the Skin Tear Decision Algorithm to Brazilian Portuguese, through two methodological steps: translation (translation, synthesis of translations, back-translations) and cross-cultural adaptation (committee of judges and pre-test).

Skin tear has been more discussed in clinical practice in recent years, however there are still gaps in knowledge about this subject. Studies report that although professionals identify the occurrence of this skin lesion, they have difficulty in making a specific diagnosis, using the correct nomenclature, as well as implementing validated instruments for managing care. In some cases, these lesions are considered as "confounding lesions" related to the etiological factors friction and shear and are wrongly diagnosed and treated as "pressure injury".

The SKIN TEAR: decision-making algorithm is one of the instruments that can significantly assist in the process of preventing and treating this lesion, considering that a simple trauma can cause a skin tear. A structured care program includes the construction of protocols, ensuring quality care and monitoring results, based on more feasible, functional and assertive



intervention measures based on scientific evidence.

## REFERENCES

1. LeBlanc K, Campbell KE, Wood E, Beeckman D. Best practice recommendations for prevention and management of skin tears in aged skin: An overview. J Wound Ostomy Continence Nurs. 2018;45:540–2. Doi: 10.1097/WON.00000000000481

2. Van Tiggelen H, LeBlanc K, Campbell K, Woo K, Baranoski S, Chang YY, et al. Standardizing the classification of skin tears: validity and reliability testing of the international skin tear advisory panel classification system in 44 countries. Br J Dermatol. 2020;183:146–54. Doi: 10.1111/bjd.18604

3. LeBlanc K, Campbell K, Beeckman D, Dunk AM, Harley C, Hevia H, et al. Best practice recommendations for the prevention and management of skin tears in aged skin. Wounds Int. 2018. Available from: www.woundsinternational.com

4. Zhang Y, Wang S, Zhang X, Zhang W, Wang X. Incidence and influencing factors of medical adhesive-related skin injury in critically ill patients. Adv Skin Wound Care. 2020;33(5):260–6. Doi: 10.1097/01.ASW.0000658584.09988.fa

5. Zhao H, He Y, Huang H, Ling Y, Zhou X, Wei Q, et al. Prevalence of medical adhesiverelated skin injury at peripherally inserted central catheter insertion site in oncology patients. J Vasc Access. 2018 Jan;19(1):23–7. Doi: 10.5301/jva.5000805.

6. Pires Júnior JF, Borges EL, Spira JAO. Incidência das lesões confundidoras da lesão por pressão em unidade de terapia intensiva oncológica. Estima (Online). 2019;17:e0219. Doi: 10.30886/estima.v16.667\_PT

7. LeBlanc K, Baranoski S, Christensen D, Langemo L, Sammon MA, Edwards K, et al. International Skin Tear Advisory Panel: A Tool Kit to Aid in the Prevention, Assessment, and Treatment of Skin Tears Using a Simplified Classification System. Adv Skin Wound Care. 2013;26(10):459–76. Doi: 10.1097/01.ASW.0000434056.04071.68.

8. Guillemin F, Bombardier C, Beaton D. Cross-cultural adaptation of health-related quality of life measures: literature review and proposed guidelines. J Clin Epidemiol. 1993;46(12):1417–32. Doi: 10.1016/0895-4356(93)90142-n.

9. Alves DFS, Almeida AO, Silva JLG, Morais FI, Dantas SRPE, Alexandre NMC. Tradução e adaptação do Bates-Jensen Wound Assessment Tool para cultura brasileira. Texto Contexto Enferm. 2015;24(3):826–33 Doi: 10.1590/0104-07072015001990014

10. Strazzieri-Pulido KC, Santos VLCG, Carville K. Adaptação cultural, validade de conteúdo e confiabilidade interobservadores do "STAR Skin Tear Classification System" Rev Latino-Am Enfermagem. 2015;23(1):155–61. doi: 10.1590/0104-1169.3523.2537.

11. Gorski LA, Hadaway L, Hagle ME, Broadhurst D, Clare S, Kleidon T, et al. Infusion therapy standards of practice. J Infus Nurs. 2021;44(Suppl 1):S1–S224. Doi: 10.1097/NAN.00000000000396.

12. Broadhurst D, Moureau N, Ullman AJ, The World Congress of Vascular Access (WoCoVA) Skin Impairment Management Advisory Panel. Management of central venous access device-associated skin impairment: an evidence-based algorithm. J Wound Ostomy Continence Nurs. 2017 May;44(3):211–20. Doi: 10.1097/WON.00000000000322. PMCID: PMC5417573.

13. Wang J, Li MM, Zhou LP, Xie RH, Pakhale S, Krewski D, et al. Treatment for grade 4 peripheral intravenous infiltration with type 3 skin tears: A case report and literature review. Int Wound J. 2022;19(1):222–9. Doi: 10.1111/iwj.13624.



14. Santos EI. Cuidado e prevenção das skin tears por enfermeiros: revisão integrativa de literatura. Rev Gaúcha Enferm. 2014 Jun;35(2):142–9. Doi: 10.1590/1983-1447.2014.02.45178.

15. Spin M, Vocci MC, Sardeli KM, Serafim CTR, Velozo BC, Popim RC, et al. Lesão por fricção em idosos: revisão integrativa. ESTIMA, Braz J Enterostomal Ther. 2021;19:e0421. Doi: 10.30886/estima.v19.1002\_P.

16. Morais GFCM, Oliveira SHS, Soares MJGO. Nurse wound evaluations in public hospital institutions. Texto Contexto Enferm. 2008;17(1):98–105. Doi: 10.1590/S0104-07072008000100011.

17. Carvalho MRF, Salomé GM, Ferreira LM. Construção e validação de algoritmo para tratamento da lesão por pressão. Rev Enferm UFPE Online. 2017;11:4171–83. Doi: 10.5205/1981-8963-v11i10a231180p4171-4183-2017.

18. Chen L, Zheng N, Jiang H, et al. Risk factors of skin tear in older persons: a protocol for systematic review and meta-analysis. BMJ Open. 2024;14:e080106. Doi: 10.1136/bmjopen-2023-080106.

#### **Funding and Acknowledgements:**

The research did not receive funding.

#### Authorship criteria (authors' contributions)

Camyle de Melo dos Santos: contributed to the conception and planning of the study, as well as to the collection, analysis, interpretation of data, writing, critical review and final approval of the published version.

Beatriz Guitton Renaud Baptista de Oliveira: contributed to the conception and planning of the study, as well as to the collection, analysis, interpretation of data, writing, critical review and final approval of the published version. Kimberly LeBlanc: contributed to the collection of data, as well as to the critical review and final approval of the published version.

Priscilla Alfradique de Souza: contributed to the collection of data, as well as to the critical review and final approval of the published version.

### **Declaration of conflict of interest**

Nothing to declare.

Scientific Editor: Francisco Mayron Morais Soares. Orcid: https://orcid.org/0000-0001-7316-2519

