



Portuguese translation of Patient and Observer Scar Assessment Scale (POSAS)

Tradução para o português da Patient and Observer Scar Assessment Scale (POSAS)

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■ ABSTRACT

Introduction: The scar assessment is a useful tool in surgical intervention and other treatments by documenting efficacy and making possible to improve them. There is no record of a standard scale in Portuguese to scar evaluation, and the Patient and Observer Scar Assessment Scale (POSAS) was chosen to translation and validation for having received the best evaluations in reviews, and because it contemplates the patients' perception. **Methods:** We translated the POSAS scale from English to Portuguese. The translation was based on orientations from the World Health Organization, with permission from the main author of the original scale. Before the pre-testing, the translated scale was sent to the authors of the original scale for analysis, and adjusts were made. **Results:** The pre-testing version was applied by three examiners in five patients each (n = 15), and difficulties were reported to the authors. No alterations were necessary during the pre-test. **Conclusion:** In this manuscript, we present the translation process of POSAS, and its validation is now in progress.

Keywords: Translating; Scars; Scales; Process assessment (Health Care); Outcome assessment (Health Care).

■ RESUMO

Introdução: A avaliação de cicatrizes é uma ferramenta útil na análise de intervenções cirúrgicas e outros tratamentos, ao documentar sua eficácia e possibilitar avanços. Não há registro de escala padrão em português para avaliação de cicatrizes, e a *Patient and Observer Scar Assessment Scale* (POSAS) foi escolhida para tradução e validação por ter recebido as melhores avaliações em revisões e por contemplar também a percepção do paciente. **Métodos:** Foi realizada a tradução da escala POSAS do inglês para o português. A tradução foi baseada em orientações da Organização Mundial da Saúde com permissão do autor principal da escala original. Antes de realizar o pré-teste, a escala traduzida foi enviada aos autores da escala original para análise, e ajustes foram realizados. **Resultados:**

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A versão para pré-teste foi aplicada por três examinadores em cinco pacientes cada (n = 15), e dificuldades foram relatadas aos autores. Nenhuma alteração foi necessária durante o pré-teste. **Conclusão:** Apresentamos neste artigo o processo de tradução da POSAS, e sua validação está em andamento.

Descritores: Tradução; Cicatriz; Escalas; Avaliação de processos (Cuidados de Saúde); Avaliação de resultados (Cuidados de Saúde).

INTRODUCTION

Scars are fibrous tissues resulting from skin injuries usually because of trauma, burn or surgical procedure. Its presence can lead to cosmetic, psychological and functional alterations in patients who may complain about pain and itching. The scar features depend on its etiology, location, suture technique and treatment of a wound. Factors like age, race and genetic predisposition can also occur¹.

Subjective assessment scales, non-invasive and easily handled are considered clinically more useful. A scale is considered appropriate to compare clinical results when it is reliable, viable, consistent, and valid². Today, there are about five assessment scales using subjective parameters in an objective manner: Vancouver Scar Scale (VSS), Manchester Scar Scale (MSS), Patient and Observer Scar Assessment Scale (POSAS), Visual Analogous Scale (VAS) and Stony Brook Scar Evaluation Scale (SBSES)³.

POSAS was developed by Draaijers et al. in 2003⁴, to give credit to the patient's opinion as an evaluator. Draaijers et al. study showed that POSAS is more consistent and reliable in burn scar assessment than in VSS.

The POSAS' observers section contains parameters (vascularization, pigmentation, thickness, relief and pliability) that were selected after a critical review of scar evaluation tools and clinical experience⁵. In addition to the observer assessment, patients answer about itching, pain, and four other parameters (color, stiffness, level, irregularity) parallel to the observer assessment. Assessment of patients allows more complete evaluation to compare the single point of view of the observer. The itching parameter was particularly significant for the patient⁴.

Van de Kar et al.⁶ included a new parameter to the original POSAS scale: scar surface area. This new parameter was added to the tasks of scale observer, initially with five parameters, which allowed the

assessment of contractions or expansions of scar surface area.

The current POSAS scale comprehends, therefore, two scales (Patient and Observer). These scales include six items punctuated numerically. Each one of the six items of both scales is punctuated from one to ten, and ten indicates worst scar or sensation. Total score of both scales consists in the sum of each one of the six items punctuation (ranging from six to 60). The lowest score, six, reflects normal skin, as the highest score, 60, indicates a very high level of tissue alteration, being this latter the worst scar imaginable.

The scar assessment is an useful tool to surgical intervention and other treatments because it efficiently register and give the chance to advance. There is no record of a standard scale in Portuguese to evaluate scars. The POSAS was chosen to be translated and validated because it has the best evaluations in literature reviews^{2,7}, and includes patients' perception.

METHODS

After authors of the scale approval we translated POSAS scale from English into Portuguese. Translation was based on guidelines provided by the World Health Organization (WHO)⁸. The first version was reviewed by experts in the field (plastic surgeons) who were fluent in English. After analysis and discussion, some pertinent changes were made. The scale in Portuguese was back-translated into English by independent translator, who was not a health professional and was blinded to the original version of the scale. The back-translation was reviewed and compared with the original version of the scale by authors.

The authors of the original scale made observations that were taken in consideration to design the pre-testing version. The scale was then applied in a small sample of patients (n = 15) to

assess its practicability. Three examiners, members of our plastic surgery service, who did have previous knowledge of the scale, applied the scale for five individuals each. Examiners were requested to report any difficulty in terms of understand or apply the scale.

Patients were aged 18 years or older and they were assisted at Hospital de Clínicas de Porto Alegre (HCPA). Data were collected in July 2014. All patients signed the consent form. No criteria were used to select scars because the study sought to analyze the understanding of examiners and patients about the scale. The Ethical and Research Committee of the HCPA approved the study.

RESULTS

During the pre-testing examiners reported difficulties seen among patients with very low educational level to understand the scale. Each examiner, A and B, reported this situation with one patient.. These patients with limitations required more time to complete understand questions, which required the examiners to use synonyms to explain what was asked. The remaining patients (87%) did not have such problem. No other problems was identified during the pre-testing. The translated scale is currently under validation (Figures 1 and 2).

DISCUSSION

POSAS is a useful tool for assessment of scars after burn injury.^{4,7} It also presented consistency and applicability for different linear scars². Reviews have reported that POSAS show adequate internal consistency and good interobserver confidence as this scale was well understood and had better correlation to the patients' estimation compared with VSS.

When scales are exclusively used by health professionals a certain tolerance exist concerning original language used, and for this reason the tool is not always translated. However, when these tests include questions to patients, to translate the questionnaire for patients mother tongue is important to guarantee safety. The translation process of our study is based on guidelines by WHO, but also used references from similar studies in which tests were applied by examiners in order understand patients' knowledge on a given subject/tool^{9,10}.

Cultural adaptation has a difficult balance to be achieved, i.e., we cannot use terms technical terminology with patients because they probably will

not understand, however, but colloquialisms should be avoid because they will be unspecific to convey the message. Therefore, the word "thickness" found in the question "Is the thickness of the scar different from your normal skin at present?" was translated into Portuguese as "*altura*", which means "height", not into the word "*espessura*", which means thickeness, because in Portuguese this adaptation seems to facilitate the patient understand and the specificity need to convey the message is maintained.

After discuss with examiners we understood that difficult to understand presented by the two patients (13%) was global due to their very low educational level, but not because of some specific terminology that lead them to not understand questions. For this reason, we decided not to change patients scale. If we make the scale too simple, there is a risk of turning it unspecific and subject to diverse interpretations especially in a country with cultural-linguistic heterogeneity like Brazil. Patients' part in the process was no altered after comparison of the original scale with the back-translation version.

Among the recommended alterations by authors of the original scale is word "Relief", which in our first translation into Portuguese the word "*Irregularidade*" choice, which means irregularity, and then it was replaced by "*Relevo*", which means relief. In *Explanatory notes on the items* the word "*Plasticidade*" (Suppleness) was used to guide the assessment of "*Maleabilidade*" (Pliability) and "*pregueamento*" was a better substitute for *wrinkling* than "*pinçamento*", which means pinch.

The different levels of expertise of those who applies the scale may interfere in its comprehension. This limitation was already discussed concerning patients, but it may also occur with the observer. Our examiners were two residents of plastic surgery and one plastic surgeon who has a doctorate in surgery. All examiners had the skills to apply the scale without previous training, by evaluate different scar types. POSAS like all subjective tool present better results depends on the examiners expertise. This interobserver variation can be further evaluated during the validation study.

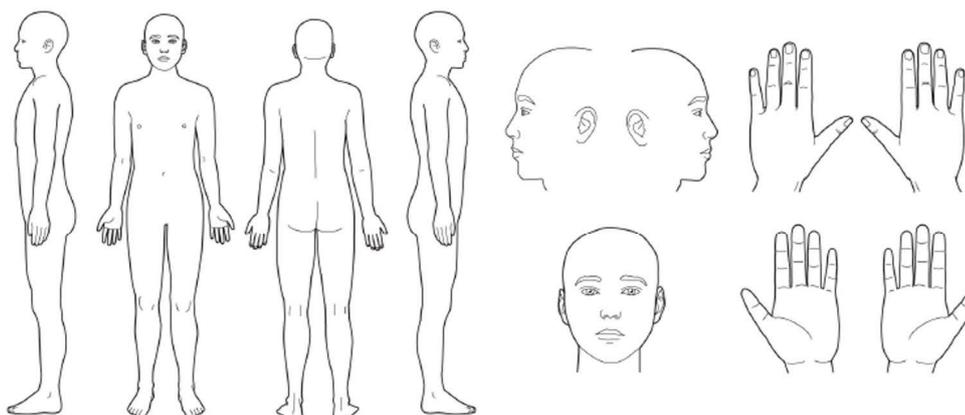
CONCLUSION

This study developed the Portuguese version of POSAS that gives the possibility to standardize scar assessment in Portuguese language. An evaluation tool in Portuguese was obtained after translation of the original scale in English. This activity improves patient perception especially because the chosen scale is the only one that includes this aspect.

POSAS Escala do observador

The Patient and Observer Scar Assessment Scale - Portuguese version
Escala de Avaliação Cicatricial Paciente/Observador - versão em Português

Data do exame:	Nome do paciente:
Observador: ARTHUR - CIRO - DANIEL	
Localidade: Hospital de Clínicas de Porto Alegre	Data de nascimento:
Pesquisa/Estudo: 14-0177 - Validação	Nº de Identificação:



	1=pele normal					pior cicatriz imaginável=10					
PARÂMETROS	1	2	3	4	5	6	7	8	9	10	CATEGORIAS
VASCULARIZAÇÃO	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	PÁLIDA ROSADA AVERMELHADA VIOLÁCEA MISTA					
PIGMENTAÇÃO	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	HIPO HIPER MISTA					
ESPESSURA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	MAIS ESPESSA MAIS FINA					
RELEVO	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	MAIS MENOS MISTA					
MALEABILIDADE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	ELÁSTICA RÍGIDA MISTA					
ÁREA DA SUPERFÍCIE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	ALARGAMENTO RETRAÇÃO MISTA					
OPINIÃO GERAL	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

Orientações

A escala de observador da POSAS consiste em seis itens (vascularização, pigmentação, espessura, regularidade, maleabilidade e área da superfície). Todos os itens tem escores que variam de 1 ("igual à pele normal") a 10 ("pior cicatriz imaginável").
A soma destes seis itens resulta no escore total da escala de observador da POSAS. Marcações categóricas são adicionadas para cada item. Ainda, uma opinião geral é ranqueada em uma escala variando de 1 a 10.
Todos os parâmetros devem ser preferencialmente comparados à pele normal ou a uma área anatómica comparável.

Notas explicativas dos itens:

- **VASCULARIZAÇÃO** Presença de vasos no tecido cicatricial por medição de enchimento capilar após empalidecer com Plexiglas. Na avaliação categórica, considerar coloração predominante.
- **PIGMENTAÇÃO** Coloração amarronzada da cicatriz por pigmento (melanina); aplique o Plexiglas na pele com pressão moderada para eliminar o efeito da vascularização
- **ESPESSURA** Distância média entre a borda subcuticular da dome e a superfície da cicatriz
- **RELEVO** A extensão onde irregularidades de superfície se apresentem (preferencialmente comparado com pele normal adjacente)
- **MALEABILIDADE** Plasticidade da cicatriz testada por pregueamento entre o polegar e o indicador
- **ÁREA DA SUPERFÍCIE** Área de superfície da cicatriz em relação à área da lesão original

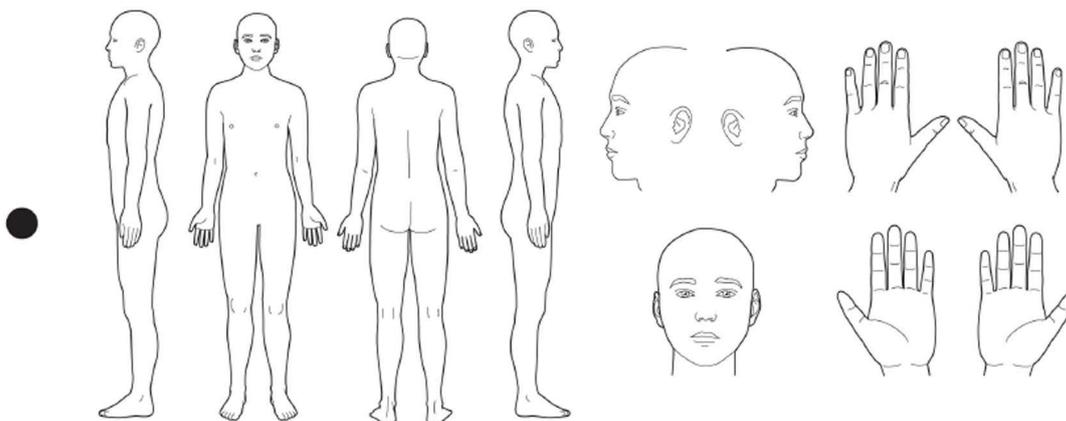
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Figure 1. Patient and Observer Scar Assessment Scale - POSAS. Observer scale translated into Portuguese (currently under validation).

POSAS Escala do paciente

The Patient and Observer Scar Assessment Scale - Portuguese version
 Escala de Avaliação Cicatricial Paciente/Observador - versão em Português

Data do exame: _____	Nome do paciente: _____
Observador: ARTHUR - CIRO - DANIEL	_____
Localidade: Hospital de Clínicas de Porto Alegre	Data de nascimento: _____
Pesquisa/Estudo: 14-0177 - Validação	Nº de Identificação: _____



	1=não, nem um pouco sim, muito=10 1 2 3 4 5 6 7 8 9 10
HOUE DOR NA CICATRIZ NAS ÚLTIMAS SEMANAS?	<input type="radio"/>
HOUE COCEIRA NA CICATRIZ NAS ÚLTIMAS SEMANAS?	<input type="radio"/>
	1=não, igual à pele normal sim, muito diferente=10
A COR DA CICATRIZ ESTÁ DIFERENTE DA COR DA SUA PELE NORMAL NESTE MOMENTO?	<input type="radio"/>
A RIGIDEZ DA CICATRIZ ESTÁ DIFERENTE DA SUA PELE NORMAL NESTE MOMENTO?	<input type="radio"/>
A ALTURA DA CICATRIZ ESTÁ DIFERENTE DA SUA PELE NORMAL NESTE MOMENTO?	<input type="radio"/>
A CICATRIZ ESTÁ MAIS IRREGULAR QUE SUA PELE NORMAL NESTE MOMENTO?	<input type="radio"/>
	1=igual à pele normal muito diferente=10 1 2 3 4 5 6 7 8 9 10
QUAL SUA OPINIÃO GERAL DA CICATRIZ COMPARADA À PELE NORMAL?	<input type="radio"/>

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Figure 2. Patient and Observer Scar Assessment Scale - POSAS - Patient scale translated into Portuguese (currently under validation).

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