

Original Article

ASSISTANCE PROTOCOL FOR VENOUS ULCERS PATIENTS: VALIDATION OF CONTENTS*

PROTOCOLO DE ASSISTÊNCIA A PESSOAS COM ÚLCERAS VENOSAS: VALIDAÇÃO DE CONTEÚDO PROTOCOLO DE ATENCIÓN A PERSONAS CON ÚLCERAS VENOSAS: VALIDACIÓN DE CONTENIDO

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Venous ulcers require complex treatment and are responsible for significant morbidity and mortality rates. This study aims at identifying aspects validated by the jury for the preparation of an assistance protocol for venous ulcer sufferers. It is a descriptive and quantitative research, with 39 professionals (30 nurses, 7 doctors and two physiotherapists), held at the Onofre Lopes University Hospital, between April and July/2010. Data collection began through a questionnaire checklist. Analysis was performed through Statistical Package for Social Science 15.0, assessing compliance with guidelines. Results were the compositional aspects of the protocol: assessment of patient and lesion history/documentation, wound care/perilesional skin, dressing suggestion, use of antibiotics and pain treatment, surgical treatment/medication, improving venous return and relapse prevention, patient referral, professional training and referral/counter-referral. It was concluded that to compose the protocol, aspects related to diagnosis, treatment and injury prevention must be considered.

Descriptors: Varicose Ulcer; Comprehensive Health Care; Protocols; Nursing.

As úlceras venosas requerem tratamento complexo e são responsáveis por morbimortalidade significativas. Este estudo objetiva identificar aspectos validados por juízes para elaboração de protocolo de assistência a pessoas com úlceras venosas. Trata-se de pesquisa descritiva, quantitativa, com 39 profissionais (30 enfermeiros, 7 médicos e 2 fisioterapeutas), realizada no Hospital Universitário Onofre Lopes, entre abril e julho/2010. A coleta de dados foi realizada através de questionário tipo *check list*. A análise foi feita no *Statistical Package for Social Science* 15.0 avaliando concordância das diretrizes. Os resultados foram os aspectos de composição do protocolo: avaliação do paciente e lesão, registro/documentação, cuidado com ferida/pele perilesional, indicação de cobertura, uso de antibiótico e tratamento da dor, tratamento cirúrgico/medicamentoso, melhoria do retorno venoso e prevenção de recidiva, encaminhamento dos pacientes, capacitação, referência/contra-referência. Conclui-se que para compor o protocolo, fazem-se necessários aspectos referentes a diagnóstico, tratamento e prevenção das lesões.

Descritores: Úlcera Varicosa; Assistência Integral à Saúde; Protocolos; Enfermagem.

Las úlceras venosas requieren tratamiento complejo y son responsables por morbilidad y mortalidad significativas. El objetivo fue identificar aspectos validados por jueces para preparación de protocolo para personas con úlceras venosas. Investigación descriptiva y cuantitativa, con 39 profesionales (30 enfermeros, 7 médicos y 2 fisioterapeutas), en el Hospital Universitario Onofre Lopes, entre abril y julio/2010. La recolección de datos a través de lista de verificación cuestionario. Análisis se realizó en *Statistical Package for Social Science* 15.0 evaluando directrices de cumplimiento. Los resultados fueron aspectos compositivos del protocolo: evaluación del paciente y lesión de registro/documentación, cuidado de herida/piel perilesional, cobertura de sentencias, uso de antibióticos y tratamiento del dolor, tratamiento quirúrgico/medicación, mejorando retorno venoso y prevención repetición, derivación de pacientes, formación, referencia/contra-referencia. Para componer el protocolo, son aspectos necesarios diagnóstico, tratamiento y prevención de lesiones.

Descriptores: Úlcera Varicosa; Assistência Integral à Saúde; Protocolos; Enfermería.

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INTRODUCTION

The most frequent ulcers found at the basic health care network and clinical and specialized hospitals, come from chronic venous insufficiency (CVI) in a percentage estimated between 80% and 85% of cases, and from arterial condition (5% to 10%), being the rest of neuropath or mixed origin ⁽¹⁻²⁾. Venous ulcers (VU), chronic injuries that result from CVI, affect people of different ages with high relapse rates (66% of cases), seriously affecting patient ambulation. Lesions require a long lasting and complex treatment and are a cause of long-term hospitalization, being also responsible for significant morbidity and mortality rates ⁽³⁻⁴⁾. CVI is the result of leg vein valves insufficiency associated to superficial venous blood reflux. This aggravation may be etiologically congenital, primary or secondary ⁽⁵⁾.

VU care, due to the long and complex treatment, requires multidisciplinary participation, protocol adherence, specific knowledge, technical skills, articulation among the different assistance levels of the Single Health System (SUS) also demanding the active participation of patients and relatives within an integral assistance perspective ⁽³⁾.

Comprehensiveness in health care is defined as a SUS principle, adopting policies and initiatives that respond to the demands and needs of the population in the access to the health care network, considering the complexity and specificities of different health-illness approaches and the biological, cultural and social characteristics of the assisted person ⁽⁶⁾.

When approaching a VU patient we must consider a systematized care based on the relevant protocol as fundamental, as it enables the multidisciplinary team to evaluate factors related to clinical aspects (pain features, CVI signs, lesion time and ulcer-affected limb

features); assistance aspects (diagnosis, measures taken and interventions) and quality of life aspects, which may interfere with the VU healing evolution ⁽⁷⁻¹¹⁾.

This idea is reinforced by studies carried out at the Minas Gerais Federal University Clinical Hospital, using a prevention and treatment protocol for chronic injuries, in which results achieved were efficient and 100% of patients had their wounds epithelialized ⁽⁷⁾.

Consequently, it is necessary to validate protocol contents, once this kind of validation is used to recognize instruments quality, being this one a fundamental aspect to legitimize research results and grant their credibility. Contents validation is a methodology that involves two different phases: the conceptual analysis, which is performed by the author based on literature and the evaluation performed by specialists (12).

According to studies (13-15), whenever assistance is not well provided, a lesion may remain for years without healing, thus provoking a high social and emotional cost. In countless cases, it makes patients guit their jobs, aggravating their socioeconomic conditions and the quality of life of both patients and relatives, besides attracting a cost for health services. In several studies at the basic ⁽¹⁴⁾, medium and high complexity levels ^(13,15) we corroborated that assistance offered by the SUS in Rio Grande do Norte (RN), is not helping effective treatment and prevention of new ulcers, thus increasing chronic lesion patients demand, as they become more and more difficult to be treated and oftentimes they include serious and irreversible complications that involve a general health deterioration and the appearance of preexistent chronic diseases.

Patient assistance, as well as the specific VU handling and treatment, require the effort of a specialized multidisciplinary team involved in a set of strategies that enable the identification of ways that allow for early achievement of proposed assistance goals, which can be reached through the assistance protocol elaborated for people with such lesions (11,14). However, it is necessary to identify which aspects shall compose the assistance protocol for VU patients, to then have it validated by specialists.

Therefore, this article seeks to identify aspects validated by the jury in order to elaborate an assistance protocol for venous ulcers patients at the Onofre Lopes University Hospital (HUOL).

METHODS

This is a descriptive study with a quantitative approach carried out in the ambulatory service of the HUOL surgical clinic, linked to the Rio Grande do Norte Federal University (UFRN), from April to July 2010. The choice of the curative sector is justified because this hospital is a reference center in UV assistance, as it is also an institution where graduating nursing and medicine trainees take their curricular and extracurricular training practices. It is also an institution that develops research and extension projects in which the author is involved.

This intentional sample was composed of 39 specialists, being 30 of them nurses, seven doctors and two physiotherapists. Professionals were three angiologists and one nurse, both members of the HUOL clinical surgery team; four angiologists from other institutions (hospitals and private clinics) and 29 nurses specialized in dermatology with recognized experience in VU treatment in the State through the Family Health Strategy and the public and private hospitals network, besides the two physiotherapists specialized in vascular disorders, one from the Southwest Bahia State University (UESB) and another one from UFRN.

The inclusion of other professionals in this study, besides HUOL employees, is justified by the small number of professionals with experience in lesion care at the selected hospital. These professionals were the jury responsible for validating contents according to guidelines already proposed in literature (2,7-9). Professionals inclusion criteria in this study were: specialists in dermatology with recognized experience in VU treatment. Exclusion criteria were: refusal to participate and not being in service during data collection.

Specialists gave their opinions with letter D (disagree) and C (agree) to validate contents regarding aspects proposed by literature: patient and lesion evaluation, history and documentation, injury and

perilesional skin care, dressing suggestion, use of antibiotics and pain treatment, CVI surgical treatment, medication, venous return improvement and relapse prevention, patient referral to specialists, professional training, and reference and counter-reference ^(2,7-9). This protocol involves multidisciplinary participation, as it depends on the collaboration of several professionals.

Contents validation ⁽¹²⁾ reflects what specialists think, in other words, it seeks for a common agreement on what it is at stake, in this case, guidelines proposed by literature ^(2,7-9) for the elaboration of an assistance protocol for venous ulcer patients. This way, specialists shall judge how adequate such guidelines are for the assistance to VU sufferers ⁽¹²⁾.

Data was analyzed in the *Statistical Package for Social Science* (SPSS) 15.0 and arithmetical averages were calculated for guidelines content validation. In the analysis, aspects (guidelines) for protocol composition such as the Kappa (K) index were considered: ≥ 0.81 (optimal).

Data collection started after HUOL authorization and approval by the HUOL/UFRN Research Ethics Committee, regulation n° 081/2007. Participants were informed on the study objectives and requested to sign an Informed Consent Agreement (ICA). All professionals involved (nurses, doctors and physiotherapists) were asked to sign.

RESULTS

Most professionals were nurses (76.9%), between 34 and 45 years of age (41.0%), of female sex (79.5%), in married/stable union (46.2%) and specialized in VU care (61.5%), 12.8% had a master's degree and 2.6% had a doctorate. Specialists work in the hospital network (46.1%) and the ambulatory sector (30.8%), with up to five years of experience in VU care (69.2%) being that 92.3% feel prepared to assist venous ulcer patients. Assistance protocol composition aspects are highlighted in charts 1 to 5.

Chart 1 – A) Patient and lesion evaluation. Natal/RN, 2011.

	Protocol composition aspects	Nurse	Doctor	Physiotherapists	Total
	Protocol composition aspects	\overline{X}	\overline{X}	\overline{X}	\overline{X}
	A) Patient and	lesion evaluation	1 (2,9)		
A1	Perform anamnesis including:				
A1.1	Name, age, sex, address.	1,00	1,00	1,00	1,00
A1.2	Clinical records.	1,00	1,00	1,00	1,00
A1.3	Socioeconomic/psychological situation.	1,00	1,00	1,00	1,00
A1.4	Personal hygiene.	1,00	1,00	1,00	1,00
A1.5	Nutritional and hematological condition.	1,00	1,00	1,00	1,00
A1.6	Use of drugs and medicines.	1,00	1,00	1,00	1,00
A1.7	Cultural values.	1,00	1,00	1,00	1,00
A1.9	Palpation, percussion and auscultation.	0,97	1,00	1,00	0,97
A2	Identification of risk factors:	,		,	, ,
A2.1	Family history of venous condition	1,00	1,00	1,00	1,00
A2.2	Varicose veins.	1,00	1,00	1,00	1,00
A2.3	Deep venous thrombosis (DVT).	1,00	1,00	1,00	1,00
A2.4	Phlebitis.	0,93	1,00	1,00	0,95
A2.5	Previous venous surgery.	1,00	1,00	1,00	1,00
A2.6	Leg surgery or fracture.	0,93	1,00	1,00	0,95
A2.9	Obesity.	0,97	1,00	1,00	0,97
A2.10	Standing/sitting work.	1,00	1,00	1,00	1,00
A2.11	Study of length and recurrence.	1,00	1,00	1,00	1,00
A4	Describe presence of:	1,00	1,00	1,00	1,00
A4.1	Pain.	1,0	1,0	1,00	1,00
A4.2	Dorsal, pedal and tibial pulse.	1,0	1,0	1,00	1,00
A5	Request:	2/0	1,0	1,00	1,00
A5.1	Complete hemogram.	1,00	1,00	1,00	1,00
A5.2	Fast glucose test.	1,00	1,00	1,00	1,00
A6	Infection evaluation.	1,00	1,00	1,00	1,00
A7	Verification of vital signs.	1,00	1,00	1,00	1,00
A8	Body mass index calculation.	0,90	1,00	1,00	0,92
A9	Define injury localization.	1,00	1,00	1,00	1,00
A10	Ankle/brachial index (ABI).	1,00	1,00	1,00	1,00
A11	Take ABI in case of:				
A11.3	Recurrent ulcer.	0,93	1,00	1,00	0,95
A11.4	Compression socks for prevention.	0,97	1,00	1,00	0,97
A11.6	Increase of pain, change in foot color and/or temperature.	0,90	1,00	1,00	0,92
A12	Describe: depth, edge, tissue and exudate.	1,00	1,00	1,00	1,00
A13	Measure area during treatment.	1,00	1,00	1,00	1,00
A15	Biopsy in case of possible infection.	0,90	1,00	1,00	0,92
A16	Colored Eco-Doppler to:	,	, ,	•	
A16.1	Identify valve insufficiency and venous system obstruction.	1,00	1,00	1,00	1,00
A16.3	Check primary/secondary VU	0,97	1,00	1,00	0,97
	wn research	•	. ,	· · · ·	

Some items obtained a Kappa (K) index lower than 0.81: thoracic pain episode (\overline{X} =0.72); hemoptysis

or history of pulmonary embolism (\overline{X} =0.77); venous exclusion, or others (\overline{X} =0.79); perform ABI if ulcer is not completely healed after 12 months of treatment (\overline{X} =0.80); exudate culture after cleaning with physiological serum when infection is suspected

 $(\overline{X} = 0.74)$ and plethysmography for behavior diagnosis and evaluation $(\overline{X} = 0.80)$.

Chart 2 – B) History and documentation, C) Lesion and perilesional skin care and D) health care insurance. Natal/RN, 2011.

Protocol composition aspects		Nurse	Doctor	Physiotherapist	Total		
	Protocol composition aspects	\overline{X}	\overline{X}	\overline{X}	\overline{X}		
	B) History an	d documentation	(10)				
B1	Check for anamnesis during the first consultation.	1,00	1,00	1,00	1,00		
B2	File exams during treatment.	1,00	1,00	1,00	1,00		
B3	Measure affected area throughout treatment.	1,00	1,00	1,00	1,00		
	C) Lesion and pe	erilesional skin caı	e ^(9,11)				
C1	Perform ulcer cleaning with saline solution and use clean curative technique.	0,87	1,00	1,00	0,90		
C3	Remove necrotic and devitalized tissue through debridement.	0,97	1,00	1,00	0,97		
C4	Treat cases of acute/exudative dermatitis with steroid cream.	0,87	1,00	1,00	0,90		
C6	Do not use topical steroids with cellulite.	0,97	1,00	1,00	0,97		
C8	Check for topical treatment allergies.	1,00	1,00	1,00	1,00		
C9	Do not use products that may be skin-sensitive such as lanoline or topical antibiotics in allergic patients.	1,00	1,00	1,00	1,00		
	D) Dressings indication (7-8)						
D1	Use simple, non-adherent, low-cost dressing that can be well tolerated by the patient.	0,97	1,00	1,00	0,97		

Source: own research.

Professionals consider that the use of high power topical steroids is less important in the lesion and perilesional skin care, during at most, one or two weeks. (\overline{X} =068) and recommend the use of low-sensitive ointment for squamous and dry skin. (\overline{X} =0.80). For

dressing selection, consider hydrocolloid or polyurethane foam curatives for painful ulcers (\overline{X} =0.71) and apply hydrocolloid protection with a zinc oxide paste bandage (Unna boot) and a compression gradient bandage (\overline{X} =0,69) when not reaching an index of 0.81.

Chart 3 – E) Use of antibiotics and pain treatment, F) CVI surgical treatment and G) Medical treatment. Natal/RN, 2011.

Dyshacel composition penasts		Nurse	Doctor	Physiotherapist	Total
	Protocol composition aspects	\overline{X}	\overline{X}	\overline{X}	\overline{X}
	E) Use of antibiot	ics and pain treat	ment ^(2,4)		
E1.1	Do not use routine antibiotics (when infection is absent).	1,00	1,00	1,00	1,00
E1.2	Use systemic antibiotics only in case of infection.	0,97	1,00	1,00	0,97
E1.3	Start adequate treatment modifying prescription whenever necessary, according to culture or biopsy result.	0,97	1,00	1,00	0,97
E3	To alleviate pain:				
E3.3	Elevate limb during rest.	1,00	1,00	1,00	1,00
	F) CVI Su	rgical Treatment (2)		
F2	Diagnosis must be complete with regards to:				
F2.1	Etiology.	1,00	1,00	1,00	1,00
F2.2	Localization of venous lesion (s).	1,00	1,0	1,00	1,00
F2.3	If there is valve insufficiency or vein segment obstruction.	1,00	1,00	1,00	1,00
F6	CVI surgical treatment together with compression therapy can reduce relapse.	0,93	1,00	1,00	0,95
	G) Medi	cal treatment (10)			
G1	Phlebotropic medicines accelerate ulcer healing and must be administrated together with other therapeutic measures.	0,90	1,00	1,00	0,92

Source: own research.

In CVI surgical and drug treatment and ligation of insufficient perforated veins may be performed through open/endoscopic methods (\overline{X} =0.77); perforating endoscopic surgery associated to saphenectomy is mainly recommended for primary CVI and for the deep

venous system (\overline{X} =0.77); valvuloplasty, venous transpositions and endovascular venous surgeries are used in secondary CVI and when it is not possible to keep the ulcer healed with compression therapy. (\overline{X} =0.79), obtained a score \geq 0.81.

Chart 4 – H) Venous return improvement and relapse prevention. Natal/RN, 2011.

	Protocol composition aspects		Doctor	Physiotherapist	Total		
			\overline{X}	\overline{X}	\overline{X}		
H) Venous return improvement and relapse prevention (13)							
H1	Venous return improvement treatment carried out by doctors, nurses and other professionals.	1,00	1,00	1,00	1,00		
H5	Avoid compression in arterial insufficiency, carcinoma and DVP cases.	0,97	1,00	1,00	0,97		
H7	Use gradual elastic compression (bandages/compression socks) for non-complicated venous ulcers.	1,00	1,00	1,00	1,00		
H8	Apply adequate compression.	1,00	1,00	1,00	1,00		
H14	Intermittent compression may improve VU healing.	0,93	1,00	1,00	0,95		
H16	Elevate legs during the day (2 to 4h) and at night, elevate feet in bed 10-15cm. Elevate lower limbs w/edema for 30 min before compression.	1,00	1,00	1,00	1,00		
H17	Prescribe walks and exercises for calf.	0,97	1,00	1,00	0,97		
H18	Use clinical and educational strategies for relapse pro	evention.	,				
	Clinical						
H18.3	Monitor skin conditions	1,00	1,00	1,00	1,00		
	Educativas:						
H18.4	Use of compression socks.	1,00	1,00	1,00	1,00		
H18.5	Skin care.	1,00	1,00	1,00	1,00		
H18.7	Leg trauma prevention.	0,97	1,00	1,00	0,97		
H18.8	Seek medical advice at first lesion symptoms.	1,00	1,00	1,00	1,00		
H18.9	Encourage mobility/exercising.	0,97	1,00	1,00	0,97		
H18.10	Elevation of affected limb.	0,97	1,00	1,00	0,97		

Source: own research.

Some variables related to venous return improvement and relapse prevention achieved scores lower than 0.81: a high compression gradual system must be the first non-complex VU treatment (\overline{X} =0.80); high compression multilayer gradual system able to sustain compression for at least one week as first line treatment for VU with TBI < 0.8 (\overline{X} =0.77); high

compression bandage to improve venous return $(\overline{X}=0.80)$; high compression elastic bandage to improve venous return $(\overline{X}=0.79)$; maximum compression socks $(\overline{X}=0.62)$; elastic compression socks type 111 (35-45 mmHg) $(\overline{X}=0.77)$; compression therapy must not be abandoned in cases of acute dematofibrosis and secondary venous lesion - DVT $(\overline{X}=0.77)$.

Chart 5 – I) Patients' referral, J) Professional training and K) Reference and counter-reference. Natal/RN, 2011.

Protocol composition aspects X X X X X X X X X		.	Nurse	Doctor	Physiotherapist	Total		
Send VU patients w/ dermatitis/allergy to dermatologist. 0,97 1,00 1,00 0,97		Protocol composition aspects		\overline{X}	\overline{X}	\overline{X}		
	I) Patients' referral (9,16)							
12.2 Non-venous etiology ulcer. 0,87 1,00 1,00 0,95 12.3 Uncertain diagnosis. 0,93 1,00 1,00 0,95 12.4 Malignancy suspect. 0,97 1,00 1,00 0,97 12.7 TBI >1.0 rapid VU deterioration. 0,87 1,00 1,00 0,99 12.8 VU W/ adequate treatment that didn't improve after three months. 0,90 1,00 1,00 1,00 0,92 12.9 Atypical ulcer distribution. 1,00 1,00 1,00 1,00 0,97 12.11 Patients W/ healed VU that may undergo venous surgery. Patients must be referred according to needs to: 13.1 Angiologist. 1,00 1,00 1,00 1,00 0,97 13.2 Endocrinologist. 0,87 1,00 1,00 1,00 0,99 13.3 Cardiologist. 0,97 1,00 1,00 1,00 0,99 13.4 Nutritionist. 1,00 1,00 1,00 1,00 1,00 13.5 Physiotherapist. 1,00 1,00 1,00 1,00 1,00 13.6 Social assistant. 0,93 1,00 1,00 1,00 1,00 13.6 Social assistant. 0,93 1,00 1,00 1,00 1,00 14 Perform biopsy in case of atypical VU, deterioration or healing failure after 12 weeks of treatment. 0,93 1,00 1,00 1,00 0,95 15.7 Psychologist. 1,00 1,00 1,00 1,00 1,00 14 Perform biopsy in case of atypical VU, deterioration or healing failure after 12 weeks of treatment. 0,93 1,00 1,00 1,00 0,95 K) Reference and counter-reference (3) K1.1 Clinical exams and VU evaluation by experienced health professionals. 0,97 1,00 1,00 1,00 0,97 K1.2 Results of requested exams. 0,97 1,00 1,00 1,00 0,97 K1.3 Treatment already started. 0,97 1,00 1,00 1,00 0,97 K1.4 Diagnosis evaluation. 1,00 1,00 1,00 1,00 0,97 K2.2 Results of requested exams. 0,97 1,00 1,00 1,00 0,97 K2.3 Diagnosis. 1,00 1,00 1,00 1,00 0,97 K2.4 Behavior 0,97 1,00 1,00 1,00 0,97 K2.5 Remarks. 0,93 1,00 1,00 1,00 0,95	I1		0,97	1,00	1,00	0,97		
12.3 Uncertain diagnosis 0,93 1,00 1,00 0,95 12.4 Malignancy suspect. 0,97 1,00 1,00 0,97 12.7 TBI 5-1.0 rapid VU deterioration. 0,87 1,00 1,00 1,00 0,99 12.8 VU w/ adequate treatment that didn't improve after three months. 1,00 1,00 1,00 1,00 12.9 Atypical ulcer distribution. 1,00 1,00 1,00 1,00 1,00 12.11 Patients w/ healed VU that may undergo venous surgery. 1,00 1,00 1,00 1,00 0,97 13.1 Angiologist. 1,00 1,00 1,00 1,00 1,00 1,00 13.2 Endocrinologist. 0,87 1,00 1,00 1,00 0,97 13.4 Nutritionist. 0,97 1,00 1,00 1,00 0,97 13.5 Physiotherapist. 1,00 1,00 1,00 1,00 1,00 13.6 Social assistant. 0,93 1,00 1,00 1,00 0,95 13.7 Psychologist. 0,97 1,00 1,00 1,00 0,95 13.8 Physiotherapist. 1,00 1,00 1,00 1,00 0,95 14 Perform biopsy in case of atypical VU, deterioration or healing failure after 12 weeks of treatment. 0,93 1,00 1,00 1,00 0,95 KI The file must include: 1,00 1,00 1,00 1,00 1,00 1.10 1,00 1,00 1,00 1,00 1,00 1.20 1,00 1,00 1,00 1,00 1,00 1.31 Treatment already started. 0,97 1,00 1,00 1,00 0,97 1.32 The file must include: 1,00 1,00 1,00 1,00 0,97 1.33 Treatment already started. 0,97 1,00 1,00 1,00 0,97 1.34 Diagnosis evaluation. 1,00 1,00 1,00 0,97 1.35 Physiotherapist. 1,00 1,00 1,00 0,97 1.36 1,00 1,00 1,00 1,00 0,97 1.37 Psychologist. 1,00 1,00 1,00 0,97 1.38 Treatment already started. 0,97 1,00 1,00 1,00 0,97 1.39 1,00 1,00 1,00 1,00 0,97 1.30 1,00 1,00 1,00 1,00 0,97 1.31 1,00 1,00 1,00 1,00 0,97 1.32 1,00 1,00 1,00 1,00 0,97 1.34 1,00 1,00 1,00 1,00 0,97 1.35 1,00 1,00 1,00 1,00 1,00 0,97 1.36 1,00 1,00 1,00 1,00 1,00 1,00 1.3								
12.4 Malignancy suspect. 0.97 1,00 1,00 0.97 12.7 TBI > 1.0 rapid VU deterioration. 0.87 1,00 1,00 0.990 1.80 1,00 1,00 0.990 1.80 1,0					1,00			
12.7								
12.8								
12.8 three months. 0,90 1,00	I2.7		0,87	1,00	1,00	0,90		
Patients w/ healed VU that may undergo venous surgery. 0,97	I2.8		0,90	1,00	1,00	0,92		
12.11 surgery. 1,00 1,	I2.9	Atypical ulcer distribution.	1,00	1,00	1,00	1,00		
I3.1 Angiologist. 1,00 1,00 1,00 1,00 1,00 I3.2 Endocrinologist. 0,87 1,00 1,00 0,90 I3.3 Cardiologist. 0,97 1,00 1,00 1,00 0,97 I3.4 Nutritionist. 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 0,95 1,00	I2.11		0,97	1,00	1,00	0,97		
13.2 Endocrinologist. 0,87 1,00 1,00 0,90 13.3 Cardiologist. 0,97 1,00 1,00 0,97 13.4 Nutritionist. 1,00 1,00 1,00 1,00 13.5 Physiotherapist. 1,00 1,00 1,00 1,00 13.6 Social assistant. 0,93 1,00 1,00 1,00 13.7 Psychologist. 1,00 1,00 1,00 1,00 14 Perform biopsy in case of atypical VU, deterioration or healing failure after 12 weeks of treatment. 0,93 1,00 1,00 1,00 15 Professional training 1,00 1,00 1,00 1,00 15 Clinical exams and VU evaluation by experienced health professionals. 1,00 1,00 1,00 1,00 15 Clinical exams and VU evaluation by experienced health professionals. 1,00 1,00 1,00 1,00 16 The file must include: 1,00 1,00 1,00 1,00 1,00 17 Clinical records summary. 1,00 1,00 1,00 1,00 1,00 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Clinical records summary. 1,00 1,00 1,00 0,97 18 Treatment already started. 0,97 1,00 1,00 0,97 18 Remarks. 0,93 1,00 1,00 0,95 18 Clinical records summary. 0,97 1,00 1,00 0,95 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of requested exams. 0,97 1,00 1,00 0,97 18 Results of reques	I3	Patients must be referred according to needs to:						
I3.3 Cardiologist. 0,97 1,00 1,00 0,97 I3.4 Nutritionist. 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 0,95 13.6 Social assistant. 0,93 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 0,95 1,00 1,00 1,00 0,95 1,00 1,00 1,00 0,95 1,00 1,00 1,00 0,95 1,00	I3.1	Angiologist.	1,00	1,00	1,00	1,00		
I3.4 Nutritionist. 1,00	I3.2	Endocrinologist.	0,87	1,00	1,00	0,90		
I3.5 Physiotherapist. 1,00 1,00 1,00 1,00 I3.6 Social assistant. 0,93 1,00 1,00 0,95 I3.7 Psychologist. 1,00 1,00 1,00 1,00 1,00 1,00 1,00 0,95 I4 Perform biopsy in case of atypical VU, deterioration or healing failure after 12 weeks of treatment. 0,93 1,00 1,00 1,00 0,95 Clinical exams and VU evaluation by experienced health professionals. 1,00	I3.3	Cardiologist.	0,97	1,00	1,00	0,97		
I3.6 Social assistant. 0,93 1,00 1,00 0,95 I3.7 Psychologist. 1,00 1,00 1,00 1,00 1,00 1,00 1,00 0,95 I4 Perform biopsy in case of atypical VU, deterioration or healing failure after 12 weeks of treatment. 0,93 1,00 1,00 1,00 0,95 I3 Clinical exams and VU evaluation by experienced health professionals. 1,00	I3.4	Nutritionist.	1,00	1,00	1,00	1,00		
1,00		Physiotherapist.						
Perform biopsy in case of atypical VU, deterioration or healing failure after 12 weeks of treatment.	I3.6	Social assistant.	0,93	1,00	1,00	0,95		
Clinical exams and VU evaluation by experienced health professionals. 1,00	I3.7	Psychologist.	1,00	1,00	1,00	1,00		
Clinical exams and VU evaluation by experienced health professionals.	I4		0,93	1,00	1,00	0,95		
No		J) Profession	nal training ⁽³⁾					
K1 The file must include: K1.1 Clinical records summary. 1,00 1,00 1,00 1,00 K1.2 Results of requested exams. 0,97 1,00 1,00 0,97 K1.3 Treatment already started. 0,97 1,00 1,00 0,97 K1.4 Diagnosis evaluation. 1,00 1,00 1,00 1,00 K1.5 Remarks. 0,93 1,00 1,00 0,95 K2 The counter-reference file must include: Value of the counter of the counte	J1		1,00	1,00	1,00	1,00		
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K1.4 Diagnosis evaluation. 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,00 0,95 K1.5 Remarks. 0,93 1,00 1,00 0,95 K2 The counter-reference file must include: K2.1 Clinical records summary. 0,97 1,00 1,00 0,97 K2.2 Results of requested exams. 0,97 1,00 1,00 0,97 K2.3 Diagnosis. 1,00 1,00 1,00 1,00 1,00 K2.4 Behavior 0,97 1,00 1,00 0,97 K2.5 Remarks. 0,93 1,00 1,00 0,95	K1.2	Results of requested exams.	0,97	1,00	1,00	0,97		
K1.5 Remarks. 0,93 1,00 1,00 0,95 K2 The counter-reference file must include: K2.1 Clinical records summary. 0,97 1,00 1,00 0,97 K2.2 Results of requested exams. 0,97 1,00 1,00 0,97 K2.3 Diagnosis. 1,00 1,00 1,00 1,00 1,00 K2.4 Behavior 0,97 1,00 1,00 0,97 K2.5 Remarks. 0,93 1,00 1,00 0,95				1,00				
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K2.2 Results of requested exams. 0,97 1,00 1,00 0,97 K2.3 Diagnosis. 1,00 1,00 1,00 1,00 K2.4 Behavior 0,97 1,00 1,00 0,97 K2.5 Remarks. 0,93 1,00 1,00 0,95								
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K2.5 Remarks. 0,93 1,00 1,00 0,95		Behavior				0,97		
	K2.5	Remarks.	0,93	1,00	1,00	0,95		

All items related to specialists referral, professional training and reference and counter-reference received optimal scoring.

DISCUSSION

Clinical CVI and VU diagnosis must be obtained through anamnesis and physical exams. Items to be considered in anamnesis are: pain and symptoms duration with current pain records; previous conditions features (especially DVT); previous limb traumas and existence of varicose disease. The physical exam for the evaluation of vascular state and lesions must be performed through palpation, percussion and auscultation in cephalocaudal direction ⁽⁹⁾.

Authors^(2,4) state that the VU diagnosis is basically clinical, including lesion evaluation and exams such as complete hemogram, fast glucose, serum albumin, vital signs, exudate culture and ankle-brachial index (ABI), colored eco-Doppler, phlebography and pletysmography.

It is worth highlighting that the documentation of clinical findings is fundamental for VU follow-up, being useful both as a legal instrument and for divulgation purposes amongst all professionals involved in assistance services. The records filed during the first and subsequent evaluations should include: anamnesis and physical exam; ulcer history (year in which the first ulcer occurred, VU location, relapses and treatments);(2,7-9), of edema, eczema, granulation, presence epithelialization, necrosis, odor, VU size and other exams. Should documentation be non-existent or incomplete, clinical evolution shall be non-systematic, which may result in non-resolutive assistance.

The use of antiseptics has been contraindicated, as they are cytotoxic. Among these solutions, the most common ones are: polyvinyl-pyrrolidone-iodine at 10% (PVPI 10%) and chlorhexidine at 4% ⁽⁷⁾. It is known that the use of topical steroids is questionable. Some authors are in favor, claiming ulcer improvement and pain and

healing time reduction ⁽¹⁷⁾, others criticize its use ⁽⁷⁾ highlighting that it is detrimental in all healing stages.

The effectiveness of ointments, in particular the essential fatty acid (EFA) in problems related to skin lesions, although questioned by some study juries, has been studied since 1929, when the first observations of lesions provoked by an EFA deficiency in prepared foods were made ⁽¹⁷⁾. The HUOL, the hospital in which the protocol shall be proposed, has EFA available for venous ulcer care.

Besides the use of ointments, it is essential to adopt adequate products and techniques for lesion cleaning, as well as the use of non-adherent dressings able to offer moisture and absorb exudate, thus facilitating healing together with compression therapy products to reduce pain ⁽¹⁵⁾. As a topical treatment complement, the surgical procedure seeks to eliminate or reduce high venous pressure transmission for ulcerated areas. In individuals with significant superficial venous system insufficiency, either isolated or combined with perforator insufficiency, an important evolution after surgery may occur, besides a prognosis improvement through time ⁽¹⁸⁾.

Despite the consensus on the use of compression therapy, studies carried out with doctors from the Canada Family Doctors School detected that more than 50% of them didn't know about the compression efficacy, being essential to discuss, reorganize and divulge therapeutics ⁽²⁾. Besides the clinical and surgical treatment, educational strategies are recommended, such as discouraging self-treatment, stimulating mobility, exercising and limb elevation ⁽¹⁹⁾.

Venous ulcer treatment requires the intervention of different medical specialties (vascular surgery, plastic surgery, dermatologist, infectologist, endocrinologist) and also the participation of a multidisciplinary health team (nurses, physiotherapists, psychologists, nutritionists and orthotic and prosthetic technician) to achieve a positive therapeutic result^(15-16,19-20). As we understand that access to professionals is not enough, it is also necessary to record patients' files that contain clinical records, performed exams, diagnosis, behavior and relevant remarks for each particular case ⁽¹⁸⁾.

CONCLUSIONS

According to the contents validation made by the juries, to compose the assistance protocol for VU patients it is necessary to consider aspects related to lesion diagnosis, treatment and prevention. Therefore, items related to patient and lesion evaluation, history/documentation, lesion and perilesional skin care, low-cost dressing adequate to the different VU phases, antibiotics and phlebotropics use criteria, surgery evaluation, relapse prevention and venous return improvement measures, patient referrals, professional

training and reference and contra-reference file filling criteria were kept.

The importance to create this protocol results in theoretical implications for the academy and practical ones for health care services, as it deals with the adoption of guidelines built through the association of literature with institutional reality. Besides, it reinforces the importance of building, validating and optimizing operational assistance protocols that can contribute to the improvement of health care practices and especially, to venous ulcer patients assistance.

It is worth highlighting that this study has some limitations. The intentional specialists sample cannot be widen due to the small number of venous ulcer specialists in the place of study, being necessary to develop further research studies at a larger scale in other health services centers with different features than the researched hospital.

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