

# Pós-Graduação em Cirurgia Translacional

ESCOLA PAULISTA DE MEDICINA - UNIFESP



# RELATÓRIO FINAL DO PÓS-DOUTORADO DISCIPLINA DE CIRURGIA PLÁSTICA

Nome do aluno: Geraldo Magela Salomé

Supervisora: Profa Dra Lydia Masako Ferreira

Título do projeto: Impacto da terapia física descongestiva e da bandagem elástica no

controle da dor de pacientes com úlceras venosas

# 1. INTRODUÇÃO

O presente relatório refere-se às atividades desenvolvidas no Pós-doutorado, com bolsa da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), no período de maio de 2015 a maio de 2018, porem a bolsa foi suspensa no mês de fevereiro de 2018 pela supervisora.

O projeto "Impacto da terapia física descongestiva e da bandagem elástica no controle da dor de pacientes com úlceras venosas", este projeto é da minha linha de pesquisa do meu doutorado foi desenvolvido no Programa de Pós-Graduação em Cirurgia Translacional da Escola Paulista de Medicina - Universidade Federal de São Paulo, dentro da área de concentração "Qualidade como método de avaliação" e linha de pesquisa que envolve a auto estima, imagem corporal e depressão e sexualidade, Capacidade funcional, dor e atividade física. Dando continuidade aos estudos do doutorado, onde estudei a qualidade de vida, autoestima, dor e capacidade em paciente com úlcera venosa, sob a supervisão da Professora Doutora Lydia Masako Ferreira, foi objetivo deste projeto a aquisição de conhecimento científico, o aprimoramento acadêmico e de pesquisa científica, a integração das atividades de ensino e pesquisa e formação de novos pesquisadores com alunos de iniciação científica, aperfeiçoamento, mestrado e doutorado.

Durante o desenvolvimento do projeto de pós-doutorado, houve a participação semanal das reuniões clínicas do Programa de Pós-Graduação em Cirurgia Translacional, às segundas-feiras, das 15h30min às 17h30min.

# 2. Descrição das Atividades Realizadas

# 2.1. Atividades de ensino

## 2.1.1. Aulas ministradas

- 1- Palestra: Protocolos de qualidade de vida em indivíduos com feridas- Mestrado profissional em Ciências, Tecnologia e Gestão Aplicadas a Regeneração Tecidual da UNIFESP- carga horaria 1 hora.
- 2- Palestra: Tecnologia desenvolvida no MP da UNIVAS- Mestrado profissional em Ciências, Tecnologia e Gestão Aplicadas a Regeneração Tecidual da UNIFESP- carga horaria 1 hora.

Palestra: Lesões, cicatrização e tipos de coberturas- Faculdade Pitágoras- carga horaria 5 horas. 2017.

# 2.1.2 Premiação do melhor trabalho apresenta em congresso

- 1-Segundo lugar com o trabalho "Algoritmo para prevenção e tratamento de lesão por pressão". 6° Congresso Brasileira de enfermagem em dermatologia. 2016.
- 2-Primeiro lugar com o trabalho "Impacto da terapia física descongestiva e da bandagem elástica no controle da dor dos indivíduos com úlcera venosa" I Latin American Wound Healing Society Meeting.

# 2.1.3 Apresentação de trabalho científico em Congresso

- 1-Apresentação pôster. Tema: Autoimagem e autoestima dos indivíduos com estoma intestinal: associação dos fatores sociodemograficos. X Congresso Argentino de Salud Mental. 2015.
- 2-Apresentação pôster. Tema: Espiritualidade e esperança de cura em indivíduos diabéticos com pé ulcerado: associação dos fatores sociodemograficos. X Congresso Argentino de Salud Mental. 2015.
- 3 Apresentação pôster. Tema: Espiritualidade e esperança de cura em indivíduos diabéticos com pé ulcerado: associação dos fatores sociodemograficos. X Congresso Argentino de Salud Mental. 2015.
- 4-Apresentação pôster. Tema: Avaliação da qualidade de vida e autoimagem em paciente com estoma intestinal. X Congresso Argentino de Salud Mental. 2015.
- 5- Apresentação tem livre. Tema:Cost comparison of pressure ulcer preventive dressings: hydrocolloid dressing versus transparente polyrethane film. I Internationl Meeting- Sobratafe Advanced Wound Care. 2015.
- 6- Apresentação tem livre. Tema: Construção de um algoritmo para avaliação e tratamento deferidas. I Internation! Meeting- Sobratafe Advanced Wound Care. 2015
- 7- Apresentação tem livre. Tema: Qualidade de vida, dor, ansiedade e depressão em pacientes com úlcera venosa, tratados com acupuntura sistemica. I Internation Meeting-Sobratafe Advanced Wound Care. 2015.

- 8- Apresentação pôster. Tema: Avaliação da espiritualidade e esperança de cura nos indivíduos com úlcera venosa em tratamento com bota de unna. IV Seminario Regional SOBEND São José dos Compos. 2015.
- 9- Apresentação tem livre. Tema: Segurança do paciente de lesões cutâneas: algoritmos e aplicativo. II Internationl Meeting- Sobratafe Advanced Wound Care. 2017.
- 10- Apresentação tem livre. Tema: Desenvolvimento de um algoritmo para prevenção e tratamento do pé de trincheira. II Internationl Meeting- Sobratafe Advanced Wound Care. 2017
- 11-Apresentação tem livre. Tema: Elaboração de um manual de prevenção do pé diabetico.II Internationl Meeting- Sobratafe Advanced Wound Care. 2017
- 12- Apresentação pôster. Tema: Aplicativo multimídia em plataforma móvel para limpeza de ferida. I Encontro UNIFES de Pós doutores.2017.

# 2.1.4. Participando em eventos (congresso, seminário, jornadas)

64º Congresso Brasileiro de Coloprotoctologia – 2015

VI Encontro da Pós Graduação medicina III Capes-2015.

II Congresso Brasiiero de tratamento vançado de ferida -2015

12° Jornada de estomaterapia da Santa Casa de Passos- 2015

X Congresso Argentino de Salud Mental-2016

III Congresso Internacional de enfermagem em dermatológica-2016

12° Jornada de estomaterapia da Santa Casa de Passos- 2016

I Encontro UNIFESP de Pós dourares -2017

# 3- Coorientações em andamento de alunos-UNIFESP

Aluna: Eliana Gonçalves Aguiar Titulo: Síndrome de fragilidade, sentimentos de importância e capacidade funcional em idosos portadores de úlcera venosa. Nível mestrado.

Aluna: Núbia Ferreira Alves. Titulo: Tradução, adaptação cultural e confiabilidade do

questionnaire of the university of Malaga, Spain (DFSQ-UMA) Nível de

aperfeizoamento.

4- Participação em bancas

Mestrado: 04

Doutorado: 01

5- Capítulo de livro

1-Lo limites de la clínicaIn: Geraldo Magela salome; Lydia Massako Ferreira. Titulo:

Spirituality hope for cure in patients with and without diabetic foot ulcers: a

comparative study. 1ª ed. Ciudad Autonoma de Buenos Aires: Associón Argentina de

profisinales de Salud Mental. 2016.p-478-479

21-Lo limites de la clínicaIn: Geraldo Magela salome; Lydia Massako Ferreira. Titulo:

La imgen corporal y la calidad de vida em pacientes com estoma intestinal. 1ª ed.

Ciudad Autonoma de Buenos Aires: Associón Argentina de profisinales de Salud

Mental. 2016.p-480-483.

6-Rivisor de periódico

Periódico: BBCS- Health Sciences

Periódico: Revista de Ciências Médicas (PUCCAMP)

Periódico: Revista Eletrônica De Enfermagem

Periódico: REME. Revista Mineira De Enfermagem





# REPÚBLICA FEDERATIVA DO BRASIL

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# Certificado de Registro de Programas de Computador

# Processo nº: BR 51 2018 000425-3

O Instituto Nacional da Propriedade Industrial expede o presente certificado de Registro de Programas de Computador, válido por 50 anos a partir de 1º de janeiro subsequente à data de Criação: 12 de agosto de 2017 , em conformidade com o parágrafo 2º , artigo 2º da Lei Nº 9.609, de 19 de Fevereiro de 1998.

Titulo:

LIMPEZA DE FERIDA

Data de Criação:

12 de agosto de 2017

Titular(es):

FUNDAÇÃO DE ENSINO SUPERIOR DO VALE DO SAPUÇAI

Autor(es):

CLARIANA SILVA GONÇALVES / GERALDO MAGELA SALOMÉ

/LYDIA MASAKO FERREIRA

Linguagem: JAVA SCRIPT

Campo de Aplicação: SV-01

Tipo Programa:

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Algoritmo Hash: Resumo Digital:

076AA4FF25C1A11FA6B14D96AEDCFC2827BC62B105D9640D7D37D813D80DB735EC8E7F6F8F0D7D

33BC09806FF6C81B58AB070E288B5E6C84A7048A0C028E6690

Expedido em: 10 de abril de 2018

Aprovado por Julio Cesar Castelo Branco Reis Moreira



# Developing a Mobile App for Prevention and Treatment of Pressure Injuries

Geraldo Magela Salomé, PhD, RN; and Lydia Masako Ferreira, MD, PhD

#### ABSTRACT

**OBJECTIVE:** This descriptive study describes the planning and development of a mobile application (app) for prevention and treatment of pressure injuries for use by providers in a university research center. The app delineates risk factors for pressure injury development, provides an evaluation of the wound, recommends wound cleansing procedures, performs pressure injury staging, and recommends treatment interventions. METHODS: A mobile app was developed using a contextualized instructional design, which involves a constructivist proposal and planning, developing, and applying specific didactic situations, thus incorporating mechanisms that favor contextualization. A literature search was conducted to identify relevant studies for the construction of the mobile app. The development process involved the selection of app tools, definition of the navigation structure, and planning of the environment configuration. The environment for downloading the app software on the Internet and installing it on the mobile device was created. MAIN RESULTS: The literature search vielded 18 articles, 2

books, and 1 master's degree thesis. A mobile app was created with an easy-to-use graphic interface. The app stores the patient's demographic characteristics and provides an evaluation of his/her wound, a list of risk factors for pressure injury development, wound cleansing procedures, and treatment interventions.

CONCLUSIONS: The developed app may be useful in clinical practice, helping to prevent pressure injuries and promote select nursing interventions for the treatment of patients with pressure injury.

**KETWORDS:** app, clinical protocols, disease prevention, mobile application, nursing intervention, pressure injury, pressure injury staging

ADV SKIN WOUND CARE 2018;31:1-6.

# INTRODUCTION

Advances in healthcare are associated with increased life expectancy, enhancing the survival of patients with serious conditions,

especially chronic diseases. Many patients who are bedridden develop pressure injuries and other types of lesions.  $^{1,2}$ 

A pressure injury is localized damage to the skin and/or underlying soft tissue; it can present as intact skin or an open ulcer and may be painful. The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear.<sup>3,4</sup> International studies report that pressure injury incidence ranges from 1.9% to 35%, and prevalence ranges from 11.1% to 31%.<sup>5–8</sup> These statistics may be reduced through preventive measures.<sup>5–9</sup> Pressure injury management represents a significant resource cost to health institutions, and this economic aspect is fundamental to the intervention decision-making process.<sup>10,11</sup>

Educational technologies in the prevention and treatment of pressure injuries (such as applications [apps] for mobile devices and online courses, among others) are a viable alternative for the delivery of health education. They present a new means of health promotion through the participation of the population in a shared construction of knowledge, providing the patient and family with reading materials, reinforcing verbal instructions, and guiding decision-making in the prevention and treatment of pressure injuries on a daily basis. <sup>12–14</sup>

The construction of a digital environment for nurses to provide care to patients with pressure injuries can be a useful strategy for training, diagnosis, and therapeutic management. <sup>15</sup> The use of mobile apps as educational, care management, and diagnostic tools is innovative and enhances interest and motivation to learn. Mobile devices hosting these apps are used by 45% to 85% of health professionals worldwide and are now more commonly used than books and journals. <sup>15–20</sup>

Given this knowledge, the aim of this study was to develop a mobile app for use by healthcare providers in the prevention and treatment of pressure injuries.

# **METHODS**

This descriptive study was approved by the Research Ethics Committee of the Dr José Antônio Garcia Coutinho School of Medical Sciences, Sapucaí Valey University, Brazil (approval no. 1.417.426).

Geraldo Magela Salomé, PhD, RN, is Affiliate Professor, Master's Degree Program in Applied Health Sciences, University of Vale do Sapucaí. Pouso Alegre, Minas Gerals; and Postdoctoral Fellow, Graduate Program in Translational Surgery, Federal University of São Paulo, Brazil. Lydia Masako Ferreira, MD, PhD, is Full Professor, Division of Plastic Surgery, Federal University of São Paulo, Brazil. The authors have disclosed no financial relationships related to this article. Submitted March 13, 2017; accepted in revised form September 11, 2017.

# The impact of decongestive physical therapy and elastic bandaging on the control of pain in patients with venous ulcers

O impacto da terapia física descongestiva e da bandagem elástica no controle da dor de pacientes com úlceras venosas

GERALDO MAGELA SALOMÉ<sup>1</sup>; LYDIA MASAKO FERREIRA, TCBC-SP<sup>1</sup>

### ABSTRACT

Objective: to evaluate pain in individuals with venous ulcers treated with elastic bandage and decongestant physical therapy. Methods: we studied 90 patients, divided into three groups with 30 patients each: a group treated with elastic bandage and decongestant physical therapy; a group treated with elastic bandage; and a group treated only with primary dressing according to tissue type and presence of exudate. We used the Pain Numerical Scale to quantify pain intensity and the McGill Pain Questionnaire for pain qualitative assessment.

Results: in the first evaluation, all patients who participated in the study reported intense pain. In the fifth evaluation, the majority of patients treated with elastic bandaging and decongestant physical therapy did not report pain; the majority of patients in the elastic bandage group reported mild pain; and most patients treated only with primary dressing reported mild to moderate pain. During all five assessments using the McGill questionnaire, most patients in the elastic bandaging and primary dressing groups used descriptors of the sensory, affective, evaluative and miscellaneous groups to describe their pain. However, in the fourth and fifth evaluations, most patients who received decongestant physical therapy combined with elastic bandaging treatment did not use any of the descriptors. Conclusion: patients treated with decongestant physical therapy and elastic bandage presented pain improvement from the third evaluation performed on.

Keywords: Leg Ulcer. Varicose Ulcer. Compression Bandages. Physical Therapy Modalities. Pain Measurement.

## INTRODUCTION

urrently, chronic wounds are considered a worldwide epidemic, reaching about 1% of the general population<sup>1</sup>. In Western countries, they affect approximately 5% of the adult population. In Brazil, on average 3% of individuals have this type of wound<sup>2,3</sup>. According to Körber et al.<sup>4</sup>, 80% of chronic wounds are found in the lower limbs. The most frequent causes of such wounds include venous and arterial insufficiency, followed by neuropathy, lymphedema, trauma, rheumatoid arthritis, vasculitis, sickle cell anemia, osteomyelitis, cutaneous tumors and infectious diseases.

The tissue repair process, especially of venous ulcers, is time-consuming and has a high rate of recurrence<sup>5</sup>, which leads to physical, social, psychological and economic changes that interfere with patients' daily lives. These changes have a negative impact on their quality of life, especially when caused by venous ulcers<sup>5-8</sup>. As a consequence, anxiety and depression may occur,

which further delay the ulcer healing process9-14.

The treatment of venous ulcers is based on the appropriate evaluation of the patients and the wound, and the correct choice of dressing type according to the wound margin, size, location, tissue type and presence of exudate. Compressive and decongestant physical therapies associated to dressing have been shown to optimize therapeutic results. It should be emphasized that the choice of the type of primary dressing also depends on the evaluation of cost-benefit and time of use<sup>15,16</sup>.

Compression therapy involving the application of pressure to the lower extremities is a key component for the treatment of chronic venous and lymphatic disease. Its main function is to neutralize gravity, which is a key factor for the disturbance of the venous and lymphatic return from the lower extremity and that results in pain improvement<sup>17</sup>. The decongestant physical therapy aims to create pressure differentials to promote the displacement of lymph and interstitial fluid, aiming at its reallocation into the bloodstream, reabsorbing the

<sup>1 -</sup> University of Vale do Sapucaí, Master's Degree in Health Science, Pouso Alegre, MG, Brazil.



# Journal of Coloproctology

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# **Original Article**

# Association of sociodemographic and clinical factors with self-image, self-esteem and locus of health control in patients with an intestinal stoma



Joelma Alves de Limaª, Karina de Cássia Munizª, Geraldo Magela Salomé<sup>b,</sup>, Lydia Masako Ferreira<sup>c</sup>

- <sup>a</sup> Universidade do Vale do Sapucaí (UNIVAS), Programa Institucional de Bolsas de Iniciação Científica (PIBIC), Pouso Alegre, MG, Brazil
- b Universidade do Vale do Sapucaí (UNIVAS), Pouso Alegre, MG, Brazil
- C Universidade Federal de São Paulo (UNIFESP), São Paulo, SP, Brazil

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Keywords: Ostomy Surgical stomas Self-image Self-esteem

#### ABSTRACT

Objective: To evaluate the sociodemographic and clinical factors related to patients with an intestinal stoma and to correlate them with locus of health control, self-esteem and self-image.

Method: 44 patients with an intestinal stoma participated in the study. The following instruments were used: Scale for Locus of Health Control, Rosenberg Self-Esteem Scale/UNIFESP-EPM and Body Investment Scale.

Results: With regard to Locus Health Control variables, sociodemographic variables with alterations were: unemployed (28.13); retirees (27.79); age up to 50 years (28.44); and singles (27.89). Regarding Body Investment Scale, the sociodemographic variables with alterations were: age up to 50 years (21.79); single (19.15) or married (17.53); retired (18.79) or unemployed (19.83); and can read and write (20.13). Regarding Rosenberg-EPM Self-esteem Scale, all sociodemographic variables were altered.

Conclusions: Ostomized patients presented alterations in the following variables: unemployed, retired, aged up to 50 years and unmarried. There were also alterations in individuals whose cause of the stoma was neoplasia, a temporary stoma, stoma time <4 years, and ostomized non-participants of an association or support group, and who also did not practice physical activities. We conclude from these findings that ostomized individuals who participated in the study and who were included in these variables showed negative feelings about their body and believed that only they could control their health and that the people involved in their care and rehabilitation did not could contribute to their improvement.

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E-mail: geraldoreiki@hotmail.com (G.M. Salomé).

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<sup>\*</sup> Corresponding author.

Salomé GM, Ferreira LM.

Locus of health control, body image and...



# ORIGINAL ARTICLE

# LOCUS OF HEALTH CONTROL, BODY IMAGE AND SELF-IMAGE IN DIABETIC INDIVIDUALS WITH ULCERATED FEET

LOCUS DE CONTROLE DA SAÚDE, IMAGEM CORPORAL E AUTOIMAGEM EM INDIVÍDUOS DIABÉTICOS COM PÉS ULCERADOS

LOCUS DE CONTROLE DE SALUD, IMAGEN CORPORAL Y AUTOIMAGEN EN INDIVIDUOS DIABÉTICOS **CON PIES ULCERADOS** 

Geraldo Magela Salomé¹, Lydia Masako Ferreira²

# ABSTRACT

Objective: to compare the locus of health control, self-esteem, and self-image in patients with diabetes mellitus with and without an ulcerated foot. Method: this is a descriptive, controlled, analytical study performed in two outpatient clinics with 104 adult diabetic patients, 52 non-ulcerated patients and 52 patients with foot ulceration. The instruments were: Locus Health Control Scale, Rosenberg Self-Esteem Scale/UNIFESP-EPM and the Brazilian version of the Body Investment Scale. Results: patients with and without ulcerated feet had a mean total score of 9.54 and 56.48, respectively, for the Health Control Locus Scale; 27,58 and 15,29, respectively, for the Rosenberg/UNIFESP-EPM Self-Esteem Scale; and 39.98 and 91.75, respectively, for the Body Investment Scale. Conclusion: diabetic patients with ulcerated feet presented significantly lower levels of self-esteem, self-image, and locus of health control compared to diabetic patients without ulceration. Descriptors: Diabetes Mellitus; Diabetic Foot; Leg Ulcer; Life Expectancy; Self Concept.

Objetivo: comparar o locus de controle da saúde, autoestima e autoimagem entre portadores de diabetes mellitus com e sem pé ulcerado. Método: estudo descritivo, analítico controlado, realizado em dois ambulatórios com 104 pacientes diabéticos adultos, 52 pacientes sem ulceração e 52 pacientes com ulceração no pé. Foram utilizados os instrumentos: Escala de Locus de Controle da Saúde, Escala de Autoestima Rosenberg/UNIFESP-EPM e a versão brasileira da Body Investiment Scale. Resultados: os pacientes com e sem pé ulcerado apresentaram um escore total médio de 9,54 e 56,48, respectivamente, para a Escala de Locus de Controle da Saude; 27,58 e 15,29, respectivamente, para a Escala de Autoestima Rosenberg/UNIFESP-EPM; e 39,98 e 91,75, respectivamente, para a Body Investment Scale. *Conclusão*: pacientes diabéticos com pé ulcerado apresentaram níveis significativamente menores de autoestima, autoimagem e locus de controle de saúde em comparação com pacientes diabéticos sem ulceração. Descritores: Diabetes Mellitus; Pé Diabético; Úlcera da Perna; Esperança de Vida; Autoimagem.

Objetivo: comparar el locus de control De la salud, autoestima y autoimagen entre portadores de diabetes mellitus con y sin pie ulcerado. *Método*: estudio descriptivo, analítico controlado, realizado en dos ambulatorios con 104 pacientes diabéticos adultos, 52 pacientes sin ulceración y 52 pacientes con ulceración en el pie. Fueron utilizados los instrumentos: Escala de Locus de Control de la Salud, Escala de Autoestima Rosenberg/UNIFESP-EPM y la versión brasilera del Body Investiment Scale. Resultados: los pacientes con y sin pie ulcerado presentaron un puntaje total medio de 9,54 y 56,48, respectivamente, para la Escala de Locus de Control de la Salud; 27,58 y 15,29, respectivamente, para la Escala de Autoestima Rosenberg/UNIFESP-EPM; y 39,98 y 91,75, respectivamente, para la Body Investment Scale. Conclusión: pacientes diabéticos con pie ulcerado presentaron niveles significativamente menores de autoestima, autoimagen y locus de control de salud en comparación con pacientes diabéticos sin ulceración. Descriptores: Diabetes Mellitus; Pie Diabético; Úlcera de la Pierna; Esperanza de Vida; Autoimagen.

Nurse, Ph.D. Professor, Professional Master's Program in Applied Health Sciences, University of Vale do Sapucai/UNIVÁS. Pouso Alegre (MG), Brazil. E-mail: salomereiki@vahoo.com.br; <sup>2</sup>Plastic Surgeon, Coordinator Medicine III CAPES, Full Professor and Coordinator of the Discipline of Plastic Surgery, Federal University of São Paulo/UNIFESP. São Paulo (SP), Brazil. E-mail: <u>lydiamferreira@uol.com.br</u>

# Impact of non-adherent Ibuprofen foam dressing in the lives of patients with venous ulcers

Impacto do curativo de espuma não aderente com Ibuprofeno na vida dos pacientes com úlcera venosa

GERALDO MAGELA SALOMÉ<sup>1</sup>; LYDIA MASAKO FERREIRA, TCBC-SP<sup>1</sup>.

### ABSTRACT

Objective: to evaluate pain in patients with lower limb venous ulcer who used non-adherent Ibuprofen foam dressing (IFD). Methods: we conducted a prospective study of patients with lower limb venous ulcers treated from April 2013 to August 2014. We used the Numerical Scale and McGill Pain Questionnaire, performing the assessments at the moment of inclusion of the patient in the study and every eight days thereafter, totaling five consultations. We divided the patients into two groups: 40 in the Study Group (SG), who were treated with IFD, and 40 in the Control Group (CG), treated with primary dressing, according to tissue type and exudate. Results: at the first consultation, patients from both groups reported intense pain. On the fifth day, SG patients reported no pain and the majority of CG reported moderate pain. Regarding the McGill Pain Questionnaire, most patients of both groups reported sensations related to sensory, affective, evaluative and miscellaneous descriptors at the beginning of data collection; after the second assessment, there was slight improvement among the patients in the SG. After the third consultation, they no longer reported the mentioned descriptors. CG patients displayed all the sensations of these descriptors until the fifth visit. Conclusion: non-adherent Ibuprofen foam dressing is effective in reducing the pain of patients with venous ulcers.

Keywords: Varicose Ulcer, Lower Extremity. Pain Measurement. Ibuprofen. Quality of life. Patient-Centered Care.

# INTRODUCTION

enous ulcers are a consequence of chronic venous insufficiency, due to venous hypertension caused by valvular incompetence of the superficial and deep veins, venous obstruction or a combination of these factors<sup>1,2</sup>. They most commonly affect the lower limbs and commit about 5% of the adult population in Western countries, with a prevalence of 0.3%. Their occurrence increases with age, being higher than 4% in individuals over 65 years old1.3. They may present exudate and odor, with the need to change dressings several times a day, with an impact on the lifestyle. It is common for the patient to present frustration and hopelessness related to treatment, since some of these lesions can take months to heal<sup>47</sup>. They cause pain, edema, loss of mobility and withdrawal from work. often leading to disability retirement. As a consequence of the pain, which aggravates or causes difficulty in locomotion, and restriction of activities of daily living and leisure, venous ulcers can lead to changes in

quality of life and self-esteem, and determine anxiety and depression, which may contribute to delay the ulcer healing process<sup>8-15</sup>.

The Ibuprofen foam dressing (IFD) is a non-adherent dressing, formed by foam attached to a semipermeable polyurethane film that allows Ibuprofen release into the wound by the presence of fluids or exudate. It is an innovative technology that promotes better control of the exudate, ensures a minimum risk of leakage or maceration of the skin, brings pain relief during the use time and during its exchange and promotes a humid environment<sup>16-18</sup>.

This study aimed to evaluate the impact of non-adherent Ibuprofen foam dressing in pain control of patients with venous ulcers.

# **METHODS**

We carried out a controlled, randomized, analytical and prospective study at the São João Ambulatory of the Dr. José Antônio Garcia Coutinho

<sup>1 -</sup> Sapucal Valley University, Professional Master's Degree in Applied Health Sciences, Pouso Alegre, MG, Brazil.

# Impact of compression therapy using Unna's boot on the self-esteem of patients with venous leg ulcers

- · Objective: To assess self-esteem in patients with venous leg ulcers treated with Unna's boot.
- Method: A descriptive, analytic, clinical study was conducted from June 2010 to May 2011 in an outpatient wound care clinic in São Paulo, Brazil. Patients of both sexes, aged ≥18 years, who had had a venous leg ulcer for more than one year and a Doppler ankle brachial index ranging from 0.8–1.0 were consecutively selected for inclusion. Patients were treated with wound dressings and Unna's boot. Self-esteem was assessed using the Brazilian version of the Rosenberg Self-Esteem Scale (RSE) at inclusion (baseline) and after 4, 8, and 12 months of compression therapy using Unna's boot. The scale is reverse-scored; thus lower scores indicate higher levels of self-esteem.
- **Results:** The patients showed a slight but significant improvement in self-esteem after 4 months of treatment (mean RSE score=17.12) compared with baseline (mean RSE score= 24.90). However, a marked and significant improvement in self-esteem was observed after 8 months (mean RSE score=7.40) and 12 months (mean RSE score=2.10) of compression therapy using Unna's boot.
- Conclusion: Patients with venous leg ulcers treated with Unna's boot for 12 months showed a significant improvement in self-esteem.
- Declaration of interest: All authors declare that no competing financial interests exist. There was no external funding for this study.

self-esteem; quality of life; leg ulcer; varicose ulcer

bronic venous insufficiency is mainly caused by incompetence of the venous system, leading to blood stagnation in the legs, an inflammatory process, and ulcer development, usually on the distal third of the legs. Venous dysfunction may result from a congenital or acquired disorder, which leads to the destruction of skin structures such as the dermis, epidermis and possibly deeper tissues.1,2 Chronic venous insufficiency, reported to be responsible for about 75% of leg ulcers.1,3 has serious socioeconomic consequences related to loss of workdays, early retirement and expenditure on treatment which is usually prolonged.4 Venous leg ulcers (VLUs) commonly occur on the distal third of the legs and correspond to 70-90% of all lower limb ulcers.2.5 Previous studies have reported the prevalence of chronic venous insufficiency and chronic VLUs ranging between 2-7% and 0.5-1.5%, respectively, in the adult population.3,5-8

Many patients with VLUs experience pain, impaired mobility and other complications that affect their global functioning. 9-12 VLUs negatively affect the patient's autonomy, lifestyle, social functioning, leisure and daily life activities, work

productivity, and may result in early retirement.2 Furthermore, because an ulcer is a problem seen by other people due to its appearance, the presence of exudate and foul odour, and the patient's functional impairment, having an ulcer may become a limiting factor in social interactions and family life, leading to social isolation. 13,14 This may all lead to negative feelings, including fear, anxiety, distress, anger and self-rejection, which in turn reduces quality of life, self-esteem and self-image and can lead to depression. 2,13,15-17 In addition, some of these patients may experience prejudice, expressed as feelings of rejection and pity, discrimination, aggression and curiosity by family members, co-workers and friends. 13,18,19 Changes in physical appearance, combined with social and cultural factors, may lead people to feel embarrassed about their condition, negatively affecting their quality of life.20,21 Body image, self-esteem, and mental health have been identified as the subjective variables that best represent the patients' perception of their condition, level of concern, and life satisfaction.21

Bednar et al.<sup>22</sup> defined self-esteem as a subjective and realistic self-approval. De Brito et al.<sup>21</sup> contended that self-esteem reflects the psychological G.M. Salome<sup>1</sup> RN PhD, Adjunct Professor; M.J.A. de Brito<sup>1</sup> PhD Adjunct Professor; L.M. Ferreira<sup>3</sup> MD, PhD, Professor; I Sapucal Valley University (UNIVAS), Pouso Alegre, MG, Brazil 2 Universidade Federal de São Paulo, Brazil Email: salomereiki@ yahoo.com.br



# Cost comparison of pressure ulcer preventive dressings: hydrocolloid dressing versus transparent polyurethane film

Objective: To evaluate and compare the costs of using a transparent polyurethane film (PF) and hydrocolloid dressing (HD) in the prevention of pressure ulcers (PUs).

Method: This descriptive, observational, longitudinal, comparative study was conducted in the intensive care units, coronary care unit and medical clinic of a charity hospital in Brazil. Data were collected during a 30-day study period, consisting of physical examination, assessment of risk factors for PU development and application of the Braden scale, which were performed at inclusion in the study and once daily during hospitalisation. Either PF or HD was applied bilaterally in the sacral and trochanterio regions for prevention of PUs in patients at a moderate to

high risk of PUs according to the Braden scale, and costs of using PU preventive dressings were estimated.

Results: The mean total costs per dressing change per patient when using the HD and PF to prevent PUs were 413.60 BRL and 74.04 BRL, respectively. There were significant between-group differences in mean costs for all variables, except for saline solution and nurse-technician services.

Conclusion: Results showed that the mean cost per dressing change per patient was lower when using the transparent PF than when using the HD.

Declaration of interest: The authors state no conflict of interest.

#### pressure ulcers e risk factors e Braden scale

ressure ulcers (PUs) are a serious problem affecting approximately 9% of all hospitalised patients and 23% of bedridden patients receiving home care.<sup>1,2</sup> The condition is difficult to treat and often associated with pain, increased morbidity and prolonged hospitalisation. The use of various types of dressings and surgical procedures demanding professional time contribute to the high costs of treatment, affecting the patient's quality of life.<sup>3,4</sup> However, immediate and effective care can minimise its deleterious effects, accelerate recovery and reduce hospital stay, decreasing hospital costs.

The National Pressure Ulcer Advisory Panel (NPUAP) recommends the application of prophylactic dressings to bony prominences for the prevention of PUs in anatomical areas frequently subjected to friction and shear.<sup>5</sup> This procedure should be combined with the use of all other preventive measures.<sup>5</sup> There are various studies on the use of PU preventive dressings in the literature; transparent polyurethane film (PF) and hydrocolloid dressings (IID) are commonly used for this purpose.<sup>6–13</sup>

Implementation of protocols for PU prevention should be based on research and scientific evidence. However, for that to happen, professionals need technical and scientific knowledge of risk factors associated with the development of PUs, as well as knowledge of the most effective and least expensive dressings available on the market that can be used to prevent PUs. The development and implementation of

protocols to evaluate the risk of developing PUs and therapeutic protocols contributes to improving the quality of life of patients and their caregivers, allowing optimal care and reduced hospital costs. <sup>4,14</sup>

Assuming that decision making should not be based on an individual opinion, but rather on the best evidence regarding efficacy, safety and cost-effectiveness of interventions, the question worth asking is: which dressing (PF or HD) shows the best cost-benefit relation for preventing PUs in hospitalised, bedridden patients? Thus, the aim of this study was to evaluate and compare the costs of using PF and HD to prevent PUs.

### Methods

This descriptive, observational, longitudinal, comparative study was approved by the Institutional Research Ethics Committee, protocol no. 59868. All patients were informed of the investigational nature

R.A.A. Dutra, RN, Master's Degree, Specialist in Stomatherapy; G.M. Salomé, RN, PhD, Adjunct Professor of the Professional Master's Degree Programme; L.M.F. Leal, RN, Master's Degree, Adjunct Professor of the Graduation Programme in Nursing; M.G. Alves, Nursa, Coordinator of the Intensive Care Unit; J.P. Moura, RN, PhD, Coordinator of the Nursing Program; A.T. Silva, Nurse, Master's Degree Student; V.O.S. Pereira, Intensive Care Unit Nurse; M.J.A. de Brito, Reproduct, PhD in Plastic Surgery, Adjunct Professor of the Professional Master's Degree Programme and Graduate Programme in Translational Surgery; L.M. Ferneira, MD, PhD, Professor and Head of the Division of Plastic Surgery E-mail: salomereiki@yahoo.com.ior

1 Holy House of Mercy of Passos, Rassos, MG, Brazil. 2 University of Vale do Sapucal (UNIVÁS), Pouso Alegre, MG, Brazil. 3 Institute of Education São Francisco (ESP), Mogi-Guaçu, SP, Brazil. 4 State University of Minas Gerais (UEMG), Passos, MG, Brazil. 5 Federal University of Affenas (UNIFAL), Affenas, MG, Brazil. 6 Federal University of São Paulo, Brazil. (UNIFESP), São Paulo, SP, Brazil.



# PARECER DO COMITÊ DE ÉTICA E PESQUISA

# FACULDADE DE CIÊNCIAS MÉDICAS DR.JOSÉ ANTÔNIO GARCIA COUTINHO -



## PARECER CONSUBSTANCIADO DO CEP

### DADOS DO PROJETO DE PESQUISA

Título da Pesquisa: O IMPACTO DA TERAPIA FÍSICA DESCONGESTIVA E DA TERAPIA COMPRESSIVA NA QUALIDADE DE VIDA E NA CICATRIZAÇÃO DE ÚLCERAS

Pesquisador: Geraldo Magela Salomé

Área Temática:

Versão: 1

CAAE: 31804214.9.0000.5102

Instituição Proponente: FUNDACAO DE ENSINO SUPERIOR DO VALE DO SAPUCAI

Patrocinador Principal: Financiamento Próprio

### **DADOS DO PARECER**

Número do Parecer: 689.079 Data da Relatoria: 09/06/2014

### Apresentação do Projeto:

Boa

# Objetivo da Pesquisa:

Comparar a efetividade da terapia física descongestiva e da terapia compressiva inelástica (Bota de Unna) na cicatrização de úlcera venosa;

Avaliar a qualidade de vida de pessoas com úlcera venosa tratadas com terapia compressiva inelástica (Bota de Unna) e com terapia física descongestiva. Objetivo factível e de relevância clínica.

## Avaliação dos Riscos e Benefícios:

Benefícios: Avaliar a efetividade da terapia física descongestiva e da terapia compressiva inelástica (Bota de Unna) na cicatrização de úlcera venosa. Melhor prognóstico desses pacientes, cicatrização mais adequada. Risco mínimo: desconforto durante a entrevista

# Comentários e Considerações sobre a Pesquisa:

Projeto de relevÂncia clínica, social. Melhora de qualidade de vida

Endereço: Avenida Prefeito Tuany Toledo, 470

Bairro: Campus Fátima I CEP: 37.550-000

UF: MG Município: POUSO ALEGRE

Telefone: (35)3449-2199 Fax: (35)3449-2300 E-mail: pesquisa@univas.edu.br

# FACULDADE DE CIÊNCIAS MÉDICAS DR.JOSÉ ANTÔNIO GARCIA COUTINHO -



Continuação do Parecer: 689.079

# Considerações sobre os Termos de apresentação obrigatória:

Todos os termos de apresentação obrigatória, foram entregues!

Recomendações:

Correção de algumas palavras no texto

Conclusões ou Pendências e Lista de Inadequações:

Trabalho aprovado

Situação do Parecer:

Aprovado

Necessita Apreciação da CONEP:

Não

Considerações Finais a critério do CEP:

Os autores deverão apresentar ao CEP um relatório parcial e um final da pesquisa de acordo com o cronograma apresentado no projeto.

POUSO ALEGRE, 16 de Junho de 2014

Assinado por: Ronaldo Júlio Baganha (Coordenador)

Endereço: Avenida Prefeito Tuany Toledo, 470

Bairro: Campus Fátima I

CEP: 37.550-000

UF: MG Munic Telefone: (35)3449-2199

Município: POUSO ALEGRE

Fax: (35)3449-2300

E-mail: pesquisa@univas.edu.br