



Clinical management of venous ulcers in primary health care*

Manejo clínico de úlceras venosas na atenção primária à saúde

Manejo clínico de úlceras venosas en la atención primaria a la salud

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ABSTRACT

Objective: To discuss the clinical management of venous ulcers in primary health care, based on the vision of users who live with this affliction. **Methods:** This was a qualitative, exploratory, descriptive study, conducted with 25 adult users in treatment in the Family Health Units. Data were collected in the second semester of 2008, using a structured instrument with questions of sociodemographic characteristics, type of cleaning, coverings, use of compression therapy, medication and prescribed guidelines. **Results:** Cleaning products are used that aggravate the granulation tissue, such as coverings with various substances, including sunflower oil and antibiotic ointments; the majority of users do not use measures to control edema. **Conclusion:** It is necessary to elaborate and adopt clinical protocols for the care of venous ulcers, as well as to provide ongoing education for health professionals.

Keywords: Varicose ulcer; Wound healing; Primary health care; Bandages

RESUMO

Objetivo: Discutir o manejo clínico de úlceras venosas realizado na atenção primária à saúde, com base na visão dos usuários que convivem com esta afecção. **Métodos:** Estudo de natureza qualitativa exploratório, descritivo, realizado com 25 usuários adultos em tratamento nas Unidades de Saúde da Família. Os dados foram coletados no segundo semestre de 2008, utilizando-se um formulário estruturado com questões de caracterização sociodemográfica, tipo de limpeza, coberturas, uso de terapia compressiva, medicamentos e orientações prescritas. **Resultados:** São usados para a limpeza produtos que agridem o tecido de granulação, como coberturas com várias substâncias, dentre elas o óleo de girassol e pomadas antibióticas; a maioria dos usuários não utiliza medidas para controle do edema. **Conclusão:** fazem-se necessárias a elaboração e a adoção de protocolos clínicos para o cuidado com úlceras venosas, bem como a capacitação permanente dos profissionais de saúde.

Descritores: Úlcera varicosa; Cicatrização; Atenção primária à saúde; Bandagens

RESUMEN

Objetivo: Discutir el manejo clínico de úlceras venosas realizado en la atención primaria a la salud, con base en la visión de los usuarios que conviven con esta afección. **Métodos:** Estudio de naturaleza cualitativa exploratorio, descriptivo, realizado con 25 usuarios adultos en tratamiento en las Unidades de Salud de la Familia. Los datos fueron recolectados en el segundo semestre del 2008, utilizándose un formulario estructurado con preguntas de caracterización sociodemográfica, tipo de limpieza, coberturas, uso de terapia compresiva, medicamentos y orientaciones prescritas. **Resultados:** Son usados para la limpieza productos que agreden el tejido de granulación, como coberturas con varias sustancias, entre ellas el aceite de girasol y pomadas antibióticas; la mayoría de los usuarios no utiliza medidas para control del edema. **Conclusión:** Se hace necesaria la elaboración y la adopción de protocolos clínicos para el cuidado con úlceras venosas, así como la capacitación permanente de los profesionales de salud.

Descriptores: Úlcera varicosa; Cicatrización de heridas; Atención primaria de salud; Vendajes

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INTRODUCTION

Venous ulcers are an important public health problem due to their high prevalence, associated with high treatment cost⁽¹⁾. It is estimated that around one percent of the population in industrialized countries will suffer from lower extremity ulcers (LEU) at some time of life, the majority being caused by problems in the venous system, leading to an accumulation of blood in the lower extremities. These lesions are also called stasis or varicose ulcers⁽²⁾.

It is difficult to estimate the exact prevalence of venous ulcers, however, a literature review has shown that in European countries, this prevalence ranged between 0.11% and 4.3%⁽³⁾. In Brazil, these data are not well known, however, an epidemiological study on venous alterations of the LE in the population of Botucatu (São Paulo) estimated a prevalence of 1.5%⁽⁴⁾, while another study conducted in Rio Grande do Norte found a prevalence of 0.36/1.000⁽⁵⁾. Venous ulcers are more prevalent in women, and generally affect elderly persons in the age-range between 60 and 80 years⁽¹⁾.

Adequate diagnosis and treatment are vital for the care of persons with venous ulcers, providing more rapid healing and prevention of recurrence⁽¹⁾. Studies have demonstrated that the treatment of excellence is compressive therapy, since this could contribute to increasing the healing rate. The multi-layered compression systems are the most effective forms in this line of treatment^(2,6).

As regards topical therapy for venous ulcers, there is no consensus among the studios and specialists, due to the different options – hydrocolloid, hydrogel, alginate and others – to be associated with compressive therapy^(6,7). The choice of topical therapy must take into account its cost, practicability, characteristics of the lesion, and if possible, the patient's preferences⁽⁷⁾.

Evidence-based practice in the care of persons with venous ulcers has been adopted in various countries, such as Scotland, England, among others^(8,9). Professionals in these countries, specialists in the subject, routinely perform periodic revision of clinical protocols directed towards the treatment of these patients^(8,9).

In Brazil, studies have pointed out the lack of systematic assistance to the individual with venous ulcers in Primary Health Care (PHC)^(5,10). Few municipalities have adopted clinical protocols that direct care actions towards the prevention and treatment of these ulcers⁽¹¹⁾. This situation may have implications for patients as regards healing time, reflecting on their quality of life, in addition to burdening the public health system financially due to unnecessary spending⁽¹²⁾.

Therefore, the importance is pointed out of scientific evidences, in support of caring for patients with venous ulcers, since the actions of practice must be based on these, with a view to promoting the patient's safety⁽¹³⁾.

The aim of this research was to discuss the clinical management of venous ulcers carried out in PHC, based on the view of patients with live with this affection. Reflections arise about this management, explaining how this care is being perceived and put into practice by patients with venous ulcers.

METHODS

This is an exploratory study with descriptive analysis of the results. The data were collected in 15 Family Health Units in a city in the "Zona da Mata" of the State of Minas Gerais, Brazil.

The option was to use a convenience sample; that is to say, non probabilistic and accidental, due to the limitation of time and resources. This type of sample allows the collection and analysis of data relative to some elements of the population under study, to provide relevant information about this population⁽¹⁴⁾.

Initially, contact was made with the 34 Units of PHC which work with the Family Health Strategy of the municipality in which the research was conducted. This contact was made with the supervisors of the respective units, and of these, 15 accepted having the study conducted. Contact with patients with venous ulcers occurred by indication of the nurses at the respective Health Units, who referred the researchers to the Community Health Agents in the micro-area in which the patient resided, to make the meeting feasible.

Twenty-five adult patients, over the age of 18 years, with diagnosis and under treatment for venous ulcer, participated in the study. The exclusion criteria were: patients with other ulcerations of the lower extremities, and those who did not agree to participate in the study, by means of signing the Term of Free and Informed Consent.

As a data collection instrument, a form structured by the researchers was used. It was previously tested, and contained closed questions about the sociodemographic characterization and clinical management of venous ulcers (technique for cleaning lesions, solutions and coverings prescribed, compressive therapy prescribed, rest and physical exercise).

The questions were put to patients with the purpose of identifying the manner in which they were instructed by the health professional (nurse and/or doctor) to perform the therapy. Having obtained the patients' verbal replies, the researcher transferred the transcription to eh instrument composed of axes with reference to venous ulcer management, contemplating the cleaning technique and products used in the procedure.

Afterwards, patients were asked which prescriptions and instructions were given by the health professions for the control of edema, also listed in the instrument by the researcher, by means of the axes of prescription of

compressive therapy, types, rest, reasons for not resting, and type of physical exercise performed.

Data were collected in the second semester of 2008, treated and analyzed, using descriptive statistics with manual calculation of simple and relative frequencies (percentages). The results were presented in tables and by means of description of the findings, and were discussed in the light of bibliographic references in support of the study.

The research received a favorable report from the Research Ethics Committee on Research with Human Beings of the Federal University of Juiz de Fora – MG, Protocol No. 1460.151.2008.

RESULTS

Of the 25 patients interviewed, 88% were women and 12%, men. The mean age was 64 years, ranging from 34 to 83 years. The most prevalent basic diseases were venous insufficiency (100%) and systemic arterial hypertension (92%), and 48% of the patients had lived with venous ulcers for over 10 years.

The cleaning and coverings used by the primary health attendance professionals, according to the patients with diagnosis of venous ulcers, may be visualized in data shown in Table 1.

Table 1. Cleaning and coverings used by the primary health attendance professionals, according to patients with diagnosis of venous ulcers. Juiz de Fora, 2008. n=25

Management of venous ulcers	No.	%
Wound cleaning technique		
0.9% Physiological solution, warm, in a jet	2	8
0.9% Physiological solution, at room temperature, with the use of forceps and IV Gauze	13	52
0.9% Physiological solution, at room temperature, with the use of forceps and IV Gauze and Polyvinylpyrrolidone Iodine in aqueous solution	2	8
Water + coconut soap	8	32
Products used for covering		
Neomicine	9	36
Collagenase	4	16
Silver Sulfadiazine	4	16
Gauze dampened with physiological solution	2	8
Sunflower oil	11	44
Sugar	3	12
Interactive coverings (Calcium Alginate, hydrocolloid, hydrogel, foam, activated charcoal)	1	4
Rifacin	1	4
Papain	2	8
Essential fatty acids	1	4
Zinc oxide	3	12

*In some cases, the use of more than one product for treatment was related.

It is pointed out that as regards solutions used in cleaning venous ulcers, 52% of patients interviewed reported the use of physiological solution at room temperature, with the use of forceps and IV Gauze, to rub the bed of the wound. The use of water and coconut soap was also shown (32%). Only 8% of the subjects mentioned the use of warm physiological solution delivered in a jet.

As regards the use of ointments, neomicine assumed an outstanding position, its use being related by 36% of the participants. It is important to point out that sunflower oil was the product most mentioned (44%).

The prescriptions and instructions for the control of edema of the lower extremity provided by the health professionals, according to the patients with diagnosis of venous ulcer, may be visualized in data shown in Table 2.

The prescriptions and instructions for the control of edema of the lower extremity provided by the health professionals, according to the patients with diagnosis of venous ulcer, may be visualized in data shown in Table 2. Juiz de Fora, 2008. n=25

Instructions for control of edema	No	%
Prescription for compressive therapy		
Compressive therapy was prescribed	10	40
Compressive therapy was no prescribed	3	12
Compressive therapy was prescribed, but was not used	12	48
Type of compressive therapy		
Elastic stocking with pressure indicator	5	20
Elastic bandage without pressure indicator	3	12
Unna Boot	2	8
Rest		
They do rest	13	52
They do not rest	12	48
Reasons for not resting		
Because they work	3	12
They need to care for the family	3	12
They do not like resting	5	20
Feel pain in the lower extremities when they get up	1	04
Other Reasons	1	04
Physical Exercises		
Do physical exercise	11	44
Do not do physical exercise	14	56
Type of physical exercise		
Flexion and extension movements of the feet and taking moderate walks	4	16
Walking	3	12

It is pointed out that 48% of the patients interviewed, in spite of being instructed to do so, did not make use of compressive therapy, and as reasons, they alleged pain and discomfort caused by the compression. The reluctance to use compression on an open wound

and the difficulty of acquiring the compression material for financial reasons were also reasons mentioned.

The elastic stocking was mentioned by 20% of the patients, as a preventive measure for recurrence of venous ulcers, and was not used as coadjuvant to the treatment of the lesion. There was no reference to the multi-layered system.

As far as rest was concerned, 52% of those interviewed were instructed to do so and complied with the prescription. Many did not follow the professional's recommendations because of work or family activities and for other reasons.

With regard to physical exercises prescribed by the health professional, 56% of those interviewed informed that they did not do them. Few mentioned movements of the feet (flexions and extensions) and walks, although moderate.

DISCUSSION

Cleaning of venous ulcers was predominantly performed with 0.9% physiological solution at room temperature with the use of forceps and IV gauze, which is contrary to the therapeutic principles for the treatment of wounds. This procedure must be avoided, because excessive rubbing irritates the skin around the wound, in addition to causing lesion to the granulation tissue itself ⁽¹⁵⁾.

In Brazil, the recommended procedure is to clean the wound with 0.9% physiological solution delivered in a jet. This technique is used for the removal of foreign bodies, loose adhered tissues, in addition to maintaining the recently formed granulation tissue ⁽¹⁵⁾. However, international studies indicate the use of potable water at room temperature, because it does not show significant indices of infection when compared with sterile saline solution ⁽¹⁶⁻¹⁸⁾. The use of tap water for cleaning leg ulcers is also referred to by the protocols of Ireland and England ⁽⁸⁻⁹⁾.

The use of coconut soap for cleaning venous ulcers was mentioned by 32% of the patients. These findings are in opposition to an *in vitro* study that showed various degrees of cytotoxicity in fibroblasts with the use of soaps ⁽¹⁹⁾. The absence of randomized clinical trials on the use of antiseptics in the topical therapy of chronic wounds reflects the lack of definition with regard to the tendency to use them, so that this is a controversial practice ⁽²⁰⁻²²⁾.

Ointments and sunflower oil were the products most prescribed by the professionals for the treatment of venous ulcers. However, the use of antibiotic ointments in the treatment of colonized wounds is not recommended by International ⁽⁸⁻⁹⁾ and Brazilian ⁽¹¹⁾ clinical protocols. The use of topical medications for the treatment of wounds and the surrounding skin frequently causes allergic reaction in individuals with chronic ulcers of the LE, and these reactions are mentioned as being significant obstacles to

healing ^(23,24). Various studies have pointed out high rates of sensitization to contact with neomycin and other topical products used in patients with venous ulcers ⁽²³⁻²⁵⁾.

As regards the use of sunflower oil, an experimental study in sheep showed an increase in the rate of healing of wounds in these animals, in comparison with those treated with Vaseline ⁽²⁶⁾. Nevertheless, there are no randomized clinical trials in humans that indicate its use in chronic wounds ⁽¹¹⁾.

Only 4% of the patients in this study used interactive coverings. This type of covering keeps the microenvironment humid, facilitating healing ⁽¹⁵⁾. The choice of coverings, such as calcium alginate, polyurethane foam, hydrocolloid, among others must be indicated, taking into account the presence of necrotic and granulation tissue, exudate and infection of the wound ⁽⁸⁾.

It is emphasized that there is no consensus as regards the indication of coverings for the topical treatment of venous ulcers. However, when these are used, it is necessary for them to be associated with compressive therapy ⁽⁶⁻⁸⁾.

The non use of compressive therapy by those interviewed is alarming, considering the contribution it makes to healing of the venous ulcer. This result is similar to that of other studies reviewed in the literature ^(5,27).

No patient had access to multi-layered compressive therapy, and mentioned only the use of the Unna boot, elastic bandage and stocking; that is to say, less effective systems than that of multilayers ⁽²⁾. This could perhaps be explained by the fact that the municipality – scenario of the study – does not make this product available to the public, which is attended to in the Health Units, and does not have a center specialized in the treatment of wounds.

It was shown that the difficulty of resting was related to domestic chores, which leads to these patients remaining in the orthostatic position for a long time, a finding corroborated by the literature ⁽¹⁰⁾. Rest and physical exercises must be associated with compressive therapy, as both diminish the effects of venous hypertension. Short walks should be encouraged, especially when associated with compression therapy, thereby facilitating venous return ^(28,29).

This study makes important contributions to the clinical management of venous ulcers, as it is supported by the perspective of the patient, the subject to whom the care is directed. The patient, differently from the health professional, generally does not have the technical input about the treatment of this affection, which allows one to consider that the results obtained, in fact, translate into how the clinical management of venous ulcers takes place within the context of PHC. On the other hand, this may configure as a limitation of the study, since the patient may have verbalized the use of a therapy differing from that which was prescribed for the care of the venous ulcer. In methodological terms,

one also has to consider the limitations imposed by the type of study with a convenience sample.

CONCLUSION

This study allowed one to discuss the clinical management of venous ulcers carried out in the PHC, based on the replies of patients. It was thus concluded that this management differs from that recommended in the scientific literature in different aspects that interfere with healing of the wound.

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