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## Treatment of patient with venous ulcer with Surepress® and interactive coverings: case report

Tratamiento de pacientes con úlcera venosa con Surepress® y revestimientos interactivos: caso clínico

Tratamento de paciente com úlcera venosa com Surepress® e coberturas interativas: relato de caso

### ABSTRACT

**Objective:** To treat a patient with three venous ulcers in the right lower limb for seven years, according to the scientific recommendations available in the literature. **Methodology:** This is a descriptive study of an applied nature developed in a service for treating patients with wounds. **Results:** With two months of assistance based on scientific evidence, the lesions healed. **Conclusion:** Transdisciplinary care with a scientific basis reduces treatment time, its cost and enhances wound healing with a positive impact on the patient's quality of life.

**DESCRIPTORS:** Varicose Ulcer; Wounds and Injuries; Wound Healing; Nursing Care; Case Reports.

### RESUMEN

**Objetivo:** Realizar el tratamiento del paciente con tres úlceras venosas en un miembro inferior dirigido a un conjunto de años de acuerdo con las recomendaciones científicas disponibles en la literatura. **Metodología:** Trata-se de um estudo descrito de natureza aplicada desenvolvido em serviço de tratamento de pacientes com ferida. **Resultados:** Com dois meses de assistência baseada em evidências científicas houve a cicatrização das lesões. **Conclusión:** A assistência transdisciplinar com embasamento científico diminui o tempo do tratamento, seu custo e potencializa a cicatrização das feridas com impacto positivo na qualidade de vida doente.

**DESCRIPTORES:** Úlcera Varicosa; Heridas y Traumatismos; Cicatrización de Heridas; Atención de Enfermería; Informes de Casos.

### RESUMO

**Objetivo:** Realizar tratamento de paciente com três úlceras venosas em membro inferior direito há sete anos de acordo com as recomendações científicas disponíveis na literatura. **Metodologia:** Trata-se de um estudo descritivo de natureza aplicada desenvolvido em serviço de tratamento de pacientes com ferida. **Resultados:** Com dois meses de assistência baseada em evidências científicas houve a cicatrização das lesões. **Conclusão:** A assistência transdisciplinar com embasamento científico diminui o tempo do tratamento, seu custo e potencializa a cicatrização das feridas com impacto positivo na qualidade de vida do doente.

**DESCRIPTORES:** Úlcera Varicosa; Ferimentos e Lesões; Cicatrização; Cuidados de Enfermagem; Relatos de Casos.

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**INTRODUCTION**

**A** Venous Ulcer (VU), also called varicose or stasis ulcer, is related to venous insufficiency and represents 80% of chronic holidays on the lower limbs (mainly not around it) and its therapeutic and complex. The prevalence of VU in the United Kingdom is 0.3% and the US is 1.0%, and the female gender is more affected<sup>(1)</sup>.

In Brazil, investigations on the incidence and prevalence of VU are rare. In Conselheiro Lafaiete (with a prevalence of chronic holidays of 1.64 / 1,000 inhabitants), in the interior of Minas Gerais, VU represents 50% of the injuries diagnosed by municipalities. Apart from the negative impact on the quality of life of two patients (physical and psychological distress), their treatment presents high custody for public coffers, challenging managers and health professionals, not assertive management of aggravation<sup>(2)</sup>.

Although the containment and compression therapies associated with the indicated curative years are considered as a standard for the treatment of patients with VU (diminish infection taxes, or time and costs of the treatment and potentialization of the healing of the wound), to underutilization of the resources and community assistance world two patients<sup>(3,4)</sup>.

Due to exposure, or present study had or objective of reporting the effects of compressive therapy associated with interactive coverage not process of venous ulcer healing in a patient who has presented a disease (recurrence) for seven years and performs traditional treatment based on creams, ointments and plants.

**METHODOLOGY**

This is a descriptive study of applied nature, developed in an ambulatory of the Regional Health Center (CRS) in the municipality of Conselheiro Lafaiete, inland of Minas Gerais, approved by the Ethics Committee in Research of the Santa Rita College (CEP / FASAR) According to Opinion No. 3,740,095 / CAAE: 26167319.7.0000.8122 of December 2, 2019.

A.G.A. patient, male, elderly, 80 years old, with diagnoses of systemic arterial hypertension (using furosemide, losartan and perindopril arginine), hypothyroidism (using levothyroxine) and chronic venous insufficiency (using diosmin + hesperidin), Directed by a Family Health Unit (USF) for the treatment of venous ulcers in the Right Lower Limb (RLL). Or Mr. A.G.A. I was invited to participate in the research and use of oil, assinou or Termo de Consentimento Livre e Clarre-

cido (TCLE) and authorization to use the images of the holidays for academic purposes and professional training.

During an anamnesis, the patient reported previous VU treatments with various plants such as *Gossypium hirsutum* L. (cotton foliage), *Stryphnodendron Adstringens* (barbatimão) and *Eucalyptus globulus* Labill (eucalyptus folha). Pomade based on collagenase and cream containing 1% silver sulfadiazine (in use) is mentioned by Mr. A.G.A., as other attempts to heal the chronic diseases.

The evolution of the treatment was accompanied by a photographic record made during the two curative cycles and measurement of the diameter of the right lower limb lathe not beginning and after complete VU healing.

**CASE STORY**

Images of the non-home patient before the start of the treatment

Patient arrived at the service accompanied by his grandson, walking, with hearing difficulties, but interacting during the service and answering questions asked by health professionals. He reported mild pain related to the wounds.

The Right Lower Limb (RLL) was swollen, with lymphedema, the ankle circumference found was 36 cm and the

Figure 1. 1st attention on: 01/14/2020



Figure 2. VU on 2/4/2020



Figure 3. VU on 2/14/2020



Figure 4. VU on 2/28/2020



ankle dorsiflexion movement was compromised.

There was hyperpigmentation in the skin of Mr. A.G.A., dryness, presence of pedicle and posterior tibial pulses present, and a good capillary perfusion was verified (<2 seconds after pressure performed with digital pulp).

The performance of the RLL Ankle Arm Index (ITB) exam was not possible due to PA 190 X 70 mmHg measured at the 1st consultation (01/14/2020) and the DAOP was clinically discarded by an angiologist and a stomatherapist nurse.

Patient had three venous ulcers in the RLL (one in the medial malleolar region, one in the lateral malleolar region and one in the posterior ankle region) with medium, infected dimensions, eliminating moderate serous exudate, hyperkeratotic margins, discreet odor and beds covered by necrosis moist (sloughs).

After evaluation and physical examination, a proposal was made to start the treatment of the patient that would happen in line with the Family Health Unit (USF) team of Mr. A.G.A.

#### Prescription for treatment

- Ciprofloxacin 500 mg (01 cpr 12/12 h for 07 days) and clindamycin 300 mg (01 cpr 08/08 h for 10 days).
- Dipyron 500 mg for pain control.
- Dressing with calcium alginate (changes according to saturation).
- Associate 40 mmHg Elastic Compressive Therapy (SurePress®).
- Moisturize whole skin with 10% urea cream.
- Rest with elevated lower limbs.
- Request for laboratory review.

Results of laboratory tests of 01/24/2020

“Hemoglobin 12.6; erythrocytes 4.75; hematocrit 38.4; leukocytes 5420; platelets 326,000; uric acid 6.9; CR 1.05; UR 31; glycated hemoglobin 5.6; TGO 16; TGP 12; Vit D 23; Vit B12 270; Free T4 1.29; TSH 12.05; CT 108; HDL 46; LDL 52; VLDL 10; TRG 52; Total PSA 3.32; Free PSA 0.58; EAS unchanged”.

Figure 5. VU on 03/10/2020



of granulation tissue in 100% of the beds. The circumference of the ankle measured during care was 29 cm.

The ulcers continued to evolve, with reduced areas and no signs of infection and other complications.

In the VU of the medial lateral malleolar region, we started an occlusive dressing with hydrocolloid plaque due to the presence of serous exudate in a small amount.

The proposed / performed treatment maintained a good evolution observed by health professionals at each service and dressing change.

The healed venous ulcer of the medial lateral malleolar region and the others maintaining good evolution without signs of complications.

We finished the VU treatment of the medial and posterior malleolar region of the ankle with hydrocolloid plate.

After two months of treatment, wound healing occurred and there were no complications during the care. The diameter of the ankle R verified during care was 31.5 cm.

Mr. A.G.A. he was discharged from treatment with prescription of graduated compression stockings (20-30 mmHg), daily rest with elevated lower limbs, skin hydration with prescribed cream and outpatient follow-up. The patient's grandson also received the guidelines to be followed and of paramount importance for the prevention of recurrences, since chronic venous insufficiency has not yet been cured, but disease control is possible according to information passed on.

## DISCUSSION

Chronic wounds, including Venous Ulcer, are highly prevalent in Brazil and worldwide. They challenge health professionals, patients and family members during treatment, since clinical management is often complex, and the healing of injuries is directly related to patient adherence to assistance and access to professionals specialized in wound management.

Figure 6. VU on 3/13/2020



Figure 7. VU on 3/17/2020



Debridement of the VU margins was performed with a No. 11 scalpel blade.

It was possible to observe a significant

improvement in the lesions, with a reduction in the bed areas, absence of an infectious process and odor, with the presence

Figure 8. VU on 3/20/2020



Figure 9. VU on 3/24/2020



Empirical treatment and based on common sense is still widespread among health professionals, which corroborates long periods of ulceration, complications related to this clinical practice (Marjolin's ulcer, amputations, among others), high treatment costs, physical and mental suffering for patients and their families.

Health professionals must provide assistance to patients with VU based on science and with proven effectiveness, as recommended by the Federal Council of Medicine (CRM) and the Federal Nursing Council (COFEN) widely disseminated in literature available in guidelines, articles with high levels of evidence and clinical care protocols developed and validated<sup>(5)</sup>.

The transdisciplinary approach is able to raise the quality of the proposed therapy and this should be the preferred way of monitoring these patients because it is able to decrease the treatment time and the socioeconomic impact on the individual's quality of life.

## CONCLUSION

The researchers found that the treatment of patients with venous ulcers based on common sense and empirical practices, contrary to what is recommended by scientific literature, is a common practice in the municipality where the study was conducted.

In addition, they concluded that transdisciplinary care with a scientific basis decreases treatment time, its cost, enhances wound healing with a positive impact on the patient's quality of life. ■

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