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CASE REPORT

Treatment of Diabetic Foot Lesions with Restructuring Cream: Case Study

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ABSTRACT

Diabetic polyneuropathy is a complication that affects about 50% of diabetic patients and is the main cause of foot ulcers, preceding 85% of amputations. Treatment is usually long and tissue repair is a challenge for health professionals. This work aims to evaluate the treatment with restructuring cream, based on bioactives and with glycolic extracts of plants. The methodology used was a case study, in 3 diabetic patients, with polyneuropathy and previous chronic non-communicable diseases, whose treatment was performed with restructuring cream. It was possible to conclude that the proposed treatment facilitates self-care, reduces treatment time and consequently health costs.

INTRODUCTION

Diabetes Mellitus - DM is a disease resulting from a chronic metabolic disorder, characterized by persistent hyperglycemia, caused by deficiency in the action and/or production of insulin. This condition is related to possible chronic micro and macrovascular complications, such as diabetic feet, which is configured with high morbidity and mortality, in addition to raising health costs. [1]

It is estimated that one in four people with diabetes may develop foot problems throughout life. According to the Brazilian Diabetes Society, Diabetic Polyneuropathy - PND, is a complication that affects about 50% of patients, and is the most important cause of foot ulcers in diabetic patients, which precede 85% of amputations. [2,3,4,5]

PND leads to numbness and in the more advanced stages, deformities. The triad PND + Deformities + Trauma are determining factors for the so-called "diabetic foot", characterized by ulceration complicated by infection and which can evolve to amputation, especially if there is poor circulation - Chronic Obstructive Arterial Disease (COAD). [4,5,6,7,8,9]

Other conditions, such as Diabetes Renal Disease (DRD), Diabetic Retinopathy (DR), low socioeconomic status, living alone and inaccessibility to the health system, are risk factors for the development of "Diabetic Foot". According to the Ministry of Health, 70% of lower limb amputation surgeries (legs, feet, toes) in Brazil are caused by poorly controlled diabetes, reaching fifty-five thousand amputations annually. [4,5,6,7,8]

The search for alternatives in the treatment of these patients, with long journeys in their recovery and tissue repair is a challenge to health professionals, as they imply between high costs, adherence to treatment, ease of use and easy handling, being a challenge for multiprofessional teams. The treatment with the restructuring cream, based on bioactives and glycolic extracts of plants, has been used in patients who do not have access to adequate conditions of care, with precarious social conditions. In the vast majority, they are attended at home and oriented to self-care.

Thus, this work aims to evaluate the effectiveness of treatment with restructuring cream in lesions of patients with Diabetes Mellitus, with previous treatment, without complete healing of the wound.

To achieve the proposed objective, this work has as methodology, case report of 4 diabetic patients, with polyneuropathy and chronic non-communicable diseases, whose treatment was performed with restructuring cream.

RESULTS:

Case 1- A 78-year-old female patient, of African descent, with a lesion in the right lower limb for 10 years; history of hypertension, colitis, heart disease, and DM. She presented a lesion in the tibial region D (Figure 1), 10 years ago, with several treatments performed, without adequate closure of the lesion.

Figure 1: Lesion in Tibial region D.

A – Lesion Assessment in Sep/19
B - Debridement performed, use of Restructuring Cream started.
C - 30 Days after the start of treatment, significant reduction of lesion diameter and depth, shrinkage of the borders
D - 56 Days of treatment, complete closure of the lesion.

Source: Author Himself

Case 2: Male patient, 43 years old, diagnosed with Diabetes Mellitus lesion in the MID (Figure 2) after automobile trauma in feb./21, with difficult evolution, considering metatarsal amputation. Use of hospital antibiotic therapy and topical dressings at the health unit, with no improvement of the lesion. Home care started on 06/30/21 with partial removal of necrotic tissue and dressing with restructuring cream with bioactive agents once a day. On 07/01/21, restructuring cream with bioactive agents once a day was used, and the treatment was maintained until 08/21, using only the restructuring cream. On 09/28/21, the lesion was completely epithelized. The treatment stimulated angiogenesis, progressing to tissue repair and total epithelialization of the wound in 74 days

Figure 2: Diabetes Mellitus lesion in the MID

E: 30/06/21 necrosis
F: 01/07/21 post debridement, start of treatment
G: 21/08/21 edge retraction and granulation improvement
H: 11/09/21 epithelialization begins
I: 28/09/21 total epithelialization

Source: Author Himself

Case 3: Female patient, 71 years old, retired, DM, SAH, venous insufficiency, with history of erysipelas in the MID (Figure 3) since 03/21. Had previous dressings with no clinical improvement, and was scheduled for limb amputation. On 03/28/21, started cleaning with 0.9% saline solution and application of restructuring cream, with significant improvement of the lesion in 60 days.

Figure 3: Erysipelas in MID

Source: Author Himself

Case 4: Male patient, 58 years old with diagnosis of Diabetes Mellitus; Lesion in the MID (5th pododactyl) (Figure 4). Use of antibiotic therapy and topical dressings in the Health Unit on 11/17/22, with no improvement of the lesion. Started on 12/15/22 debridement spray 01x per week during the week patient using restructuring cream. On 12/26/22 she presents mummified and loose medial and distal phalanx, being removed and maintaining the clinical conduct. On 06/03/23 lesion totally epithelized. The treatment stimulated angiogenesis, evolving to tissue repair and total epithelialization of the wound in 82 days.

Figure 4: Lesion in MID (5th pododactyl)

Source: Seles (2022)

DISCUSSION:

The treatment and follow-up of patients with diabetic foot lesions requires specialized care, patient and family adherence to the proposed treatment, being a challenge for the multidisciplinary team. Tissue repair and epithelialization in patients with chronic diseases take a long time, bringing psychosocial and economic impacts to patients.

The choice of treatment with restructuring cream was based on the ease of use of the product by the patient and family, aiming at reducing consultations, expenses with dressings and products, based on the natural active principles of its formula for autolytic debridement, stimulation of angiosenesis, maintenance of the moist environment, bactericidal action, fungicidal action and without contraindications.

This cream has in its composition Aminomethylpropanol, cetostearyl alcohol, stearic acid, disodium EDTA, phenoxyethanol, centrimonium chloride, BHT (butyl hydroxytoluene), glycolic apple extract, lanolin paraffin, zinc oxide and water. With active principle of repairing action of the restructuring cream that is obtained by the synergistic action of its components in the formula. The differential of this cream, is in the extraction of glycolic acid, obtained from Extraya-CHNO, by an exclusive fermentative process. It is a unique and patented process, contributing to a quick result, in addition to its bacteriostatic, bactericidal and antiseptic action, helping cell renewal quickly and safely.

CONCLUSION:

The restructuring cream proved to be effective in stimulating angiogenesis, 10 with complete healing of lesions, being an alternative to the treatment of diabetic patients.

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