

*EVOLUTION OF PRESSURE INJURY ASSOCIATED WITH CONSERVATIVE INSTRUMENTAL
BREAKDOWN BY NURSES IN PRIMARY HEALTH CARE*

**EVOLUÇÃO DE LESÃO POR PRESSÃO ASSOCIADA AO DESBRIDAMENTO INSTRUMENTAL
CONSERVADOR PELA ENFERMEIRA NA ATENÇÃO PRIMÁRIA À SAÚDE**

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ABSTRACT

Objective: to describe the successful experience of treating a pressure injury using conservative instrumental debridement technique by the Primary Health Care nurse associated with treatment with special coverings. **Methodology:** this is a descriptive, exploratory, qualitative research, of the type case study of a patient with a complex wound. Held at USF Alto de Coutos 2, in the Suburban Railway Health District in the city of Salvador, Bahia. The data collected through observation, interview and analysis of medical records throughout the treatment. The ethical aspects of the National Health Council and the research approved by the Ethics Committee of the Federal University of Bahia were respected. **Results:** The patient presented a pressure lesion in the sacral region, covered by coagulation necrosis. Conservative instrumental debridement of the necrotic tissue was performed, without bleeding or other complications, associated with treatment with special coverings. After 72 days of follow-up, through evaluations and nursing interventions, considering aspects of the lesion, there was an increase in granulation tissue and almost complete healing. **Conclusion:** nursing work through instrumental debridement combined with the use of special coverings proved to be incisive and decisive for the healing process.

Keywords: Pressure Ulcer. Debridement. Nurses. Primary Health Care

RESUMO

Objetivo: descrever a experiência exitosa do tratamento de uma lesão por pressão utilizando técnica de desbridamento instrumental conservador pela enfermeira da Atenção Primária à Saúde associado ao tratamento com coberturas especiais. **Metodologia:** trata-se de uma pesquisa descritiva, exploratória, qualitativa, do tipo estudo de caso de um paciente com ferida complexa. Realizado na USF Alto de Coutos 2, do Distrito Sanitário do Subúrbio Ferroviário no município de Salvador, Bahia. Os dados coletados por meio de observação, entrevista e análise de prontuário ao longo do tratamento. Foram respeitados os aspectos éticos do Conselho Nacional de Saúde e a pesquisa aprovada pelo comitê de Ética da Universidade Federal da Bahia. **Resultados:** A paciente apresentou lesão por pressão em região sacral, coberta por necrose de coagulação. Foi realizado desbridamento instrumental conservador do tecido necrótico, sem sangramentos ou outras intercorrências, associado ao tratamento com coberturas especiais. Após 72 dias de acompanhamento, mediante avaliações e intervenções da enfermagem, considerando aspectos da lesão, evidenciou-se crescimento do tecido de granulação e cicatrização quase que completa. **Conclusão:** o trabalho da enfermagem através do desbridamento instrumental aliado ao uso de coberturas especiais mostrou-se incisivo e decisivo para o processo de cicatrização.

Palavras-chave: Lesão por Pressão. Desbridamento. Enfermeira. Atenção Primária à Saúde

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INTRODUCTION

Pressure Injuries (PL) are an important problem for the health sector, considering the high prevalence, including in Primary Health Care (PHC), which is the locus of first access for the user, especially in the COVID-19 pandemic. PLs generate great impacts for the health sector due to their morbidity and mortality, which is why prophylactic measures are essential to prevent the disease, as well as knowing the proper management for the treatment of already installed injuries is extremely important.

Pressure injuries result from prolonged soft tissue compression between a bony prominence and an external surface, which generates ischemia and consequent necrosis of the area⁽¹⁾. Knowledge about the factors that generate PL, its prevention, as well as the best treatment approaches for this injury is necessary.

It is noteworthy that the development of ulcers has multifactorial causes, the result of a complex process. The intensity and duration of pressure converge to the collapse of capillaries and consequent interruption of the flow of blood and nutrients, leading to local ischemia, tissue hypoxia, tissue acidosis, edema and tissue necrosis⁽²⁾. In addition to pressure, extrinsic factors also constitute: friction, shear, humidity, as well as the type and time of surgery, anesthesia, surgical positions and positioning. Added to these are

the intrinsic factors that contribute to the appearance of these ulcers, such as: age, body weight, nutritional status, level of consciousness, chronic diseases such as diabetes mellitus, vasculopathies, neuropathies, hypertension and anemia⁽³⁾. All these factors, whether intrinsic or extrinsic, make rehabilitation difficult, which increases the risk of developing PL.

According to the literature, PL prevalence data vary worldwide. Studies carried out in several countries, with different methodologies, show a prevalence of 2.9% to 8.34% in Spain, 14.8% in England, 19.1% in the United States, and 23% in Brazil, with regard to home care⁽⁴⁾. These data increase when the reference is the hospital environment: 15% to 25% in the United States, and 10% to 55% in Brazil⁽⁵⁾.

Despite their high prevalence, most PL are potentially preventable, considering that there are several prevention measures, some of them of low complexity and high effectiveness, such as skin inspection and periodic change of position; the use of pads under bony prominences; the application of scales that determine the risk of developing PL and standardize behavior from there. In addition to nursing care, special high-tech coverages are available, which promote microclimate control and reduce pressure on application sites⁽²⁾.

The costs for the treatment of patients

with PL are extremely high in Brazil and worldwide.

A study carried out in Switzerland revealed that the estimated cost of pressure ulcer treatment is equivalent to US\$ 2,000 to US\$ 6,000 per patient with a healed lesion, with an average time of 14 weeks⁽⁶⁾. In Brazil, a study carried out in Minas Gerais revealed that these costs are around US\$ 12,000 per patient with a healed lesion, with an average time of 20 weeks⁽⁷⁾. This data reveals that in developing countries, the cost for the total healing of an PL is higher and takes longer, which may be related to difficulties in treatment, which may be related to the limitation of adequate coverage in health services, many of them costly, in addition to difficulties in the debridement of injuries by professionals.

As it is a frequent complication in critically ill patients, PL has a great impact on recovery and quality of life, making it essential to adopt preventive measures, as well as interventions that will favor the cure of these patients. Considering that PHC nurses are healthcare professionals who directly assist patients and play an important role in the treatment process, including through the assessment and debridement of injuries, as well as the prescription of special coverage⁽⁸⁾. For this, research is essential since they constitute important indicators of care quality in nursing, allowing to support the planning, management and evaluation of

nursing actions, in addition to guiding educational actions for the nursing staff with a focus on training⁽⁹⁾.

Considering the relevance of the nursing role in the prevention and treatment of pressure injuries, the following objective emerged: to describe the successful experience of treating a pressure injury using a conservative instrumental debridement technique by the PHC nurse associated with treatment with special dressings.

METHODOLOGY

This is a descriptive, exploratory, qualitative research, of the case study type, carried out in the city of Salvador, Bahia⁽¹⁰⁾.

The study setting was the Family Health Unit (USF) Alto de Coutos 2, in the Sanitary District of Subúrbio Ferroviário (DSSF), from 10/03/2021 to 22/04/2021. As inclusion criteria, the following were considered: patients with complex lesions, aged over 18 years, who made their participation official by signing the Informed Consent Form (FICF). As exclusion criteria: consecutive absences, by the patient, without justification, on the days scheduled for the dressing procedure and non-compliance with the guidelines proposed by the USF nurse. One patient with a complex wound was selected in order to report all team activities and clinical evolution. Data collection took place through observation, interviews

(nursing history) and medical record analysis, in addition to other data collection techniques such as: interview with the accompanying family member and physical examination of the patient. The patient in question, due to a neurological deficit, had the consent form filled out by her husband.

The research complies with Resolution nº 466/2012, of the National Health Council of the Ministry of Health. The research protocol was approved by the Ethics Committee of the Federal University of Bahia under nº 453.482/2013.

RESULTS

M.J.P.F.S., 62 years old, attended the USF Alto de Coutos II for the first time on 03/10/2021, in the company of her husband. At the time, she presented neurological disorders, being disoriented in time, space and quite agitated. He brought with him a discharge report from the Emergency Care Unit (UPA) with the following information: admission: 02/12/2021; high: 02/22/2021; diagnostic suspicion: presenting altered level of consciousness secondary to stroke (brain CT without alterations); A/E seizure (resolved); A/E fever (ITU? Pneumonia? Treated).

Upon admission (12/02/2021), her husband reports that, upon arriving from work, at 3:00 pm, he found the patient lying on the ground, "hitting" on the floor, having a

convulsive crisis, and being brought to the unit (UPA). She reports that the patient lost consciousness, becoming sleepy, without recognizing her husband. The same reports that the last time he saw the patient well was at 7:30 am. She reports that on Tuesday, three days prior to admission to the UPA, she had vomiting episodes during the day and difficulty in urinating. He also reports that he has already had several convulsive crises. Does not follow up. Denies ischemic history. Patient with Systemic Arterial Hypertension (SAH), using losartan. Husband denies that he currently has gastrointestinal and respiratory complications.

Regarding the physical examination on admission: general: REG, LOT, eupneic, acyanotic, anicteric and afebrile; vital data: BP: 115x81 mmHg; HR: 138 bpm; FR: 17 irpm; SpO₂: 95%; AR: MVBD without RA; ACV: BRNF in 2T without murmurs; ABD: globose, RHA+; no masses or VMG, no signs of peritoneal irritation; EXT: poorly perfused, edema, redness and heat in MIE; NEURO: GLASGOW 11, PIFR, no focal deficit; MON. CEPHALICAL: scalp lesion not visualized, however, the stretcher is wet in the head. Evolution (22/02/2021): hemodynamically stable patient, maintaining improvement in the level of consciousness, GLASGOW 14. LAB (13/02/2021): Hb: 13; Ht: 38.7; plaq: 10730 (S: 83); Ur: 17; Cr: 0.6; TGP: 33; Na: 137; K: 3.8; LAB (22/02/2021): Hb: 9.7; Ht: 29.9; leuco: 11,980 (no deviations); plaq:

440,000; Ur: 19; Cr: 0.6; Na: 135; K: 3.9; INR: 1.2; TP: 66%. ECG (12/02/2021): sinus tachycardia. TR Covid-19 02/14/2021): negative.

The husband states that the patient remained confined to bed in the same position throughout the hospital stay (10 days).

Upon examination, he presented a pressure lesion (PPL) in the sacral region,

covered by poorly adhered coagulation necrosis, especially on the edges, which facilitated debridement (Figure 1). It presented borders with pale pink granulation and hyperchromic perilesion, without phlogistic signs.

Figure 1 - First assessment, recorded before debridement. Salvador, Bahia, March 10, 2021.



Source: Own authorship

The patient had to be held on the stretcher while the dressing was being applied due to agitation. In this first moment, conservative instrumental debridement of the necrotic tissue was performed, without

bleeding or other complications (Figure 2). After removing the devitalized tissue, a cavity in the upper portion of the right buttock was already evidenced.

Figure 2 - Recorded right after conservative instrumental debridement. Salvador, Bahia, March 10, 2021.



Source: Own authorship

As primary coverage, a hydrogel with alginate associated with gauze impregnated with PHMB was used, and the gauze was introduced as much as possible in order to fill the entire cavity space. Prescribed daily change. The patient left the unit walking without assistance.

On 03/11/2021, the subsequent dressing change was performed by the

nursing technician, under the supervision of the nurse, as prescribed (Figure 3). The observation made was that the patient had removed the covering the night before and the husband covered it with a clean cloth. This situation occurred other times along the way, but it was observed that there was no interference in the evolution of the healing process.

Figure 3 – Second exchange. Salvador, Bahia, March 11, 2021.



Source: Own authorship

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As part of the unit's routine, the assessment by the nurse in the dressing room takes place once a week and is only requested outside the routine in case of need. That's what happened in the exchange on 03/12/2021. The husband reported fever that was not thermometered and complained of local pain. Upon evaluation of the lesion, he had poorly adhered slough and pale pink granulation, in addition to maximum purulent exudate and a foul odor. It had viable edges. Tax.: 36.9°C. Medical evaluation was requested, after which antibiotic therapy was prescribed.

On 03/15/2021, after the weekend, the patient returned with improvement in systemic symptoms and also in the appearance of the lesion. The granulation was already brighter, however, with the presence of thinly adhered sludge (Figure 4). On that occasion, the husband suggested the possibility of spacing out the exchange interval, as he lived far away and came to the unit on foot. As the lesion was already showing good evolution, replacement was prescribed every 2 days.

Figure 4 – Third exchange. Salvador, Bahia, March 15, 2021.



Source: Own authorship

Due to the change of routine in health units caused by the Covid-19 pandemic, the next assessment by the nurse, which would be on

03/19/2021, took place on 03/24/2021. The lesion already had evident contraction of the edges; the bed, which previously had a very

irregular surface, was already flatter, with the exception of the cavity in the upper portion of the right buttocks, which still had slightly

adhered slough (Figure 6). Again, conservative instrumental debridement of the devitalized tissue in the cavity was performed.

Figure 5 – Seventh exchange. Salvador, Bahia, March 24, 2021.



Source: Own authorship

Figure 6– Seventh exchange, angle that makes it possible to visualize the cavity. Salvador, Bahia, March 24, 2021



Source: Own authorship

Figure 7– Injury follow-up. Salvador, Bahia, May 21, 2021



Source: Own authorship

It is noteworthy that on that date, the patient reports that she will go to the interior, in the family's house. In this last consultation, the nurse provides guidance on the use of gauze with petrolatum, with changes every 48 hours, and prepares a reference form and delivers it to the patient.

DISCUSSION

Pressure Injury in Primary Health Care

According to epidemiological data related to LP in Brazil, 19.1% to 39.4% of hospitalized patients have this type of injury. Data regarding the occurrence of LP at home are restricted, and PHC is the first service accessed by patients, responsible for referring patients, when necessary, for specialized care⁽¹¹⁾. In the meantime, efficient curative and preventive care practices need to be implemented at all levels of care, as well as in

the PHC under the care of the USF, where there is the establishment of guidelines aimed at the practice of prevention, emphasizing health promotion actions.

Chronic wounds treated in PHC are mentioned by nurses as recurrent injuries, characterized as a complex injury when associated with systemic pathologies that impair the healing process, such as hypertension, chronic venous disease, arterial disease and peripheral neuropathy, physical trauma, infections cutaneous lesions and tumors⁽¹²⁻¹³⁾, as was the case of the reported patient, with SAH, using Losartan.

Highlighting SAH as a predisposing factor to PL, explained by the increase in peripheral vascular resistance, associated with the use of antihypertensive drugs, which reduce blood flow and tissue perfusion, facilitating the onset of PL⁽¹⁴⁾. In addition to these, diseases such as Alzheimer's and

cerebrovascular accident sequelae increase the risks of developing LP because they result in reduced physical mobility, considered as a condition of major importance in the development of LP, as it affects the ability to effectively relieve pressure⁽¹⁴⁻¹⁵⁾.

Skills of nursing professionals in the prevention, assessment and treatment of skin lesions through special coverage

Healing is a physiological process of repairing damaged tissues and requires the health professional to have basic knowledge about the physiology of the skin, factors that interfere with healing, and systematic assessments, with prescriptions for frequency and type of coverage needed to reconstitute the injured tissue⁽¹⁶⁾. Thus, each wound has a specific healing process that requires different needs, and careful evaluation is essential not only to choose the type of coverage and products available, but in association with the physiology of healing, the risk factors, the steps of the healing process. tissue repair and the elements that delay this process⁽¹⁷⁾.

The literature points out that the treatment and measures to prevent wounds are the responsibility of nurses, and they must carry out daily assessment of the client's clinical status as a way of prevention, and in cases of presence of PL, perform the wound assessment, determining factor for proper therapy, in addition to instructing the nursing staff and supervising them in the execution of dressings⁽¹⁸⁾.

Although in terms of nursing care to prevent injuries, changes in position at scheduled times for bedridden patients are essential, redistributing the pressure concentrated under the bony prominences and minimizing shear areas⁽¹⁹⁾. It was found that the patient remained contained in bed in the same position throughout the hospital stay (SIC) in the Emergency Care Unit, evolving to LP in the sacral region, covered by wet coagulation necrosis. This is reckless data, considering the harmful potential of PL, which is an avoidable problem in most cases, which prolongs hospitalizations, increases hospital costs, increases the risk of sepsis and increases morbidity⁽²⁰⁾.

In that study, the association of two special dressings was used: mead with alginate and gauze impregnated with PHMB. It is noteworthy that mead with alginate has the function of promoting the hydration of the lesion, absorption of the exudate and autolytic debridement. Antimicrobial gauze is a 100% cotton woven gauze dressing impregnated with Polyhexamethylene Biguanide (PHMB), an antimicrobial agent with a broad spectrum of action against microorganisms such as bacteria, fungi and yeasts, indicated for the treatment of colonized, infected or with high risk of infection, considering that its high-quality weave offers greater protection against infection, facilitates handling and reduces the risk of fraying or adhering to the wound bed on removal.

Studies reinforce that PHMB is structurally similar to natural antimicrobial peptides that are produced by many living beings and has a broad spectrum of action against bacteria, viruses and fungi⁽²¹⁾. Corroborating these findings, studies show that the use of gauze impregnated with PHMB is considered effective in the treatment of complex wounds with regard to pressure injuries⁽²²⁾.

It is up to the nurse, after evaluating and stratifying the risk, to be concerned with developing effective prevention protocols and strategies, promoting training and educational actions, standardizing care and its applicability involving the team in this process so that everyone follows the same assessment standards, treatment and prevention of injuries. Simple measures such as effective decubitus change and acquisition of appropriate materials that provide relief in pressure zones, promote patient comfort, reduce the LP rate, reduce unnecessary expenses, in addition to avoiding physical and psychological suffering that these injuries can bring to the patient.

Cofen Resolution No. 160/93, in its Article 16, makes it a duty and responsibility of the nursing professional to ensure the client's assistance free from damage resulting from imprudence, negligence or malpractice⁽²³⁾. Actions developed to raise awareness and engage all professionals involved in patient care about the importance

of prevention, from admission to discharge, are relevant to ensure better results in the pursuit of quality care provided, providing safe, humanized and harm-free care. The occurrence of LP is considered an indicator of quality in nursing care. As a result, the Ministry of Health (MS) published on April 1, 2013, Ordinance no. 529, which instituted the National Patient Safety Program (PNSP), which has the prevention of pressure injuries as one of its work axes⁽²⁴⁾.

In a study with intensive care nursing professionals from an educational institution in the State of Ceará, most recognize the necessary nursing care to prevent PL such as changing position, in addition to care with bone prominences, application of dressings with hydrocolloid, AGE, film, collagenase, patient hydration, friction and shear reduction⁽¹⁸⁾. However, in practice, they report difficulties with the surveillance and prevention of PL, essentially with regard to changing the position every two hours and identifying the risk of PL.

In the recognition of patients at risk of developing PL, in addition to changes in position, it is recommended to improve the professionals' ability to use a measurement instrument, such as the Norton, Braden, Gosnell and Waterlow scales, which present adequate validity indices. predictive, sensitivity and specificity⁽²⁵⁾.

In view of the provision of quality care promoted by nurses in the prevention of

PL, two Australian studies find ambiguity in answers regarding the difficulties encountered by these professionals, in knowing how to organize priorities and deal with challenges at the organizational level of the institution, such as the dimensioning of the team for PL surveillance and prevention, reverberating in task overload, higher occurrence of adverse events and deficits in the quality of care⁽²⁶⁻²⁷⁾.

In this context, the nursing professional fills an important gap in the treatment of wounds and these should be recognized as a preponderant figure of great relevance in the care of patients or those at risk of developing wounds. This professional maintains prolonged contact with the client, assesses the injury, plans actions, coordinates care, monitors the evolution and not only supervises and performs the dressings prescribed by the physician, performing highly relevant work.

For a correct diagnosis of the type of injury and success in prescribing the most suitable type of treatment, it depends more on the competence and knowledge of the professionals involved, on their ability to properly assess and select techniques and resources, than on the availability of resources and technologies sophisticated. Nurses are essential in the assessment, classification, treatment and monitoring of skin lesions and must base their care practice on new knowledge, ensuring the implementation of prevention measures and the correct use of the

covers provided by the institution, considering the peculiarities of the lesion and the patient for adequate therapy and faster improvement of these lesions⁽¹⁷⁾.

Due to the complexity of the clinical management of the PLs described above, it is up to the nurse to know about the entire process that involves the treatment of the patient and to develop the same standards of assessment, treatment and prevention for the entire team involved in the care.

That said, the monitoring and evaluation performed by the nurse in the dressing room once a week was evidenced and it is only requested outside the routine in case of need. The authors^(28,29) point out the importance of patients being monitored and continuously evaluated about their general state of health, undergoing consultations whenever necessary, as was done.

Some authors envision the nurse's autonomy in ordering microbiological exams as parameters in determining the most adequate coverage, as these exams signal, in addition to the types of bacteria present in the wound bed, the number of colonies and this is directly linked to the conditions of infection or no, therefore, guiding the need to use antimicrobial coverage⁽²⁹⁾. It is up to the professional nurse, according to Cofen Resolution No. 04/2016, to carry out sample collection for microbiological tests upon authorization and request through a medical request, being a challenge for nurses

nationwide to identify and diagnose a wound infection only with clinical evaluation, without the possibility of using non-invasive microbiological tests in practice⁽³⁰⁾.

It should be noted that investing in continuing education with nurses who actively work in the prevention and assessment of complex wounds can allow the exchange of experiences from the case discussions of patients assisted in daily life, in order to address the weaknesses in professional practice or even in insecurity about the products available on the market and their particularities⁽⁹⁾.

Legal competence of nurses to perform debridement

In the presence of necrotic tissue in the wound bed, which interferes with tissue repair, as well as any foreign body, there is a need to remove the necrosis, reducing the bacterial load, toxins and other substances that inhibit healing⁽³¹⁾. Its benefits and favoring the growth of granulation tissue and adequate revitalization are supported by national and international publications^(17,32-33).

As observed in the patient, the presence of necrotic tissue, it was decided to perform conservative instrumental debridement of necrotic tissue, without bleeding or other complications. There was a cavitary wound in the upper portion of the right buttock, using a hydrogel with alginate

associated with gauze impregnated with PHMB. After the removal of the devitalized tissue, the patient's return for further evaluations showed evolution of the general appearance of the lesion, with exudate control and formation of granulation tissue.

Conservative instrumental debridement is a conservative approach, which can be performed at the bedside or in an outpatient setting, to remove necrotic tissue, without causing pain or bleeding, using techniques known as: Cover, Slice and Square⁽³⁴⁾. This procedure requires technical-scientific competence from the nurse, as it uses sharp instruments and should only be performed when there is adequate perfusion around the wound⁽³⁵⁾.

It is essential to ensure that the entire range of professional practice is always in accordance with the legislation of the professional association, regarding the possibilities of treatment, debridement and prescription of coverage, as clarified in the following documents: Opinion COREN-SP 002/2015 - CT (Prescription of dressings for wound treatment by a Nurse)⁽³⁶⁾; Opinion COREN-SP CAT No. 013/2009 – (Performance of debridement by the nurse)⁽³⁷⁾ and Opinion No. 04 /2016 CTAS COFEN (Manifestation of procedures in the nursing area)⁽³⁰⁾. Professional autonomy cannot be dissociated from the responsibilities assigned to decision-making, it being necessary that nurses in their practice honestly recognize

their limits of knowledge, skills and personal aptitudes, improving treatments, such as the practice of debridement and thus contributing to the reduction of delays in the wound healing process.

The authors⁽³⁴⁾, in a study carried out with nurses from the Family Health Strategy (FHS) in a municipality in southern Brazil, found that although most nurses recognize debridement techniques and contraindications, they manifest insecurity in choosing the best method to use, they do not feel able and safe to perform it, a reflection of the fragility of instrumentation, as they report that knowledge was acquired only at graduation and the distance from this daily practice.

Based on the above, although nurses have legal support to carry out conservative instrumental debridement, as long as they feel fit, there is a need to empower themselves with this knowledge, and the search for specialization and training is essential. It emphasizes the importance of nurses introducing instrumental debridement in their care, in order to minimize the number and period of hospital admissions, as well as infections and costs with wound treatment, while ensuring the success of the healing process in consonance with the specificities of the population⁽³⁴⁾. It is noteworthy that these in-service training aimed at performing debridement was promoted by the nurse of technical reference in dressings of the DSSF,

in order to train nurses in the units with the aim of providing comprehensive, holistic, humanized care, minimizing complications and pilgrimages of the patient in search of professionals who perform this procedure.

Humanized care

In addition to the treatment of the complex wound, the preparation of the wound bed, prescription of adequate coverage, it is necessary to understand determining factors that involve the patient with the wound, their particularities, comorbidities and thus, welcoming, listening and giving positive responses to both individual needs. as collective to the people cared for⁽²⁹⁾. For this, it is necessary that the professionals involved are available to listen and value the desires, feelings, behaviors and needs of the patient and family, so that, together, they can plan care actions, in order to go beyond technical competence and mastery biological.

Thus, it is noted that the injury is installed in the physical part, but affects the psychological and emotional side, as it affects the individual's life and way of being and being in the world. In this aspect, it is worth emphasizing the importance of clarifying to patients, providing guidance on how the lesion evolves, in order to provide support in living with it. It is essential that patients with chronic injuries receive care marked in humanized care, qualified and detailed listening, have emotional and psychological

support throughout the therapeutic process. Understanding individuality in coping with the adversities of life and, in this case, the wound, will bring fundamental resources for nurses to offer holistic care, increasingly humanized⁽³⁸⁾.

In this context, it was possible to observe in the reported case the guarantee of the humanization of care, considered relevant in the act of caring. Considering the evolution in the wound healing process and the daily mobility difficulties to change dressings with the patient's husband's request for spacing between returns to the USF, the nurse changed the prescription to every 2 days.

From this perspective, for humanized and individualized care, it is the responsibility of nursing to provide immediate care and systematize care, surveying the diagnosis, planning interventions and evaluating the care provided. In the case of patients with chronic wounds, nursing diagnoses must thus highlight the patient's other needs, in addition to the physical injury, in order to understand the particularities of each context of life and thus plan the interventions to be developed. It is up to the team, when caring for people with wounds, to build a therapeutic bond by evaluating the individual and the potential risks. Thus, it is possible to provide guidance on the necessary procedures and care, making dressings and following the principles of healing and skin health recovery in a systematic and evidence-based way⁽³⁹⁾.

Complex wounds compromise the quality of life of their patients, bringing several factors that affect their social life, such as low self-esteem and changes in body image, depression, anxiety, pain and mobility difficulties⁽⁴⁰⁾. Corroborating the study carried out by Aguiar⁽⁴¹⁾, with eight elderly people in a Physiotherapy clinic in the interior of Bahia, patients with venous ulcers experience situations of shame, embarrassment, prejudice and limitations resulting from the wounds.

The nurse also has an essential role in sensitizing the patient to follow their guidelines, since in the nursing consultation the professional must prescribe and guide the treatment, in addition to clarifying all doubts and reinforcing the importance of continuity of care, since, it is known that a well-informed patient has better adherence to treatment⁽⁴²⁾.

FINAL CONSIDERATIONS

This study made it possible to demonstrate, from the clinical case report on nursing care in patients with pressure injuries, how relevant the possibility of treating the injury with effective methods, such as instrumental debridement of conservative necrotic tissue and the use of special dressings for optimize the formation of granulation tissue and the LP healing process. In addition to reinforcing the importance of implementing prevention measures⁽³⁹⁾, such as changing

positions and risk assessment through the use of scales with predictive validity and humanized care with emotional and psychological support during the therapeutic process. This corroborates the relevant work of the nursing team for the treatment of LP based on the best scientific evidence.

Although this is a topic discussed in scientific publications, epidemiological data point to a high prevalence and incidence of pressure injury, requiring nurses to know about essential strategies for the maintenance and integrity of the skin, which is a challenge for this professional who must propose strategies and develop adequate protection, prevention and treatment actions.

REFERENCES

1. Li D, Mathews C. Automated measurement of pressure injury through image processing. *J Clin Nurs*. 2017; 26(21-22):3564-3575. doi: 10.1111/jocn.13726. Epub 2017 Apr 3. PMID: 28071843.
2. Jackson D, Durrant L, Bishop E, Walthall H, Betteridge R, Gardner S, et al. Pain associated with pressure injury: A qualitative study of community-based, home-dwelling individuals. *J Adv Nurs*. 2017; 73(12):3061-3069. doi: 10.1111/jan.13370
3. Corbett LQ, Funk M, Fortunato G, O'Sullivan DM. Pressure Injury in a Community Population: A Descriptive Study. *J Wound Ostomy Continence Nurs*. 2017; 44(3):221-227. doi: 10.1097/WON.0000000000000320. PMID: 28328647.
4. Soares CF, Heidemann ITSB. Promoção da saúde e prevenção da lesão por pressão: expectativas do enfermeiro da atenção primária. *Texto contexto - enferm*. [Internet]. 2018 [cited 2021 Apr 20]; 27(2): e1630016. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072018000200301&lng=en.
5. Mendonça ASGB, Rocha AC dos S, Fernandes TG. Perfil epidemiológico e clínico de pacientes internados com lesão por pressão em hospital de referência no Amazonas. *Rev Epidemiol e Control Infecção* [Internet]. 2018; 8(3):253-60. Available from: <https://online.unisc.br/seer/index.php/epidemiologia/article/view/11857>
6. Meier C, Boes S, Gemperli A, Gmünder HP, Koligi K, Metzger S, et al. Treatment and cost of pressure injury stage III or IV in four patients with spinal cord injury: the Basel Decubitus Concept. *Spinal Cord Ser Cases* [Internet]. 2019; 5(1):30. Available from: <http://www.nature.com/articles/s41394-019-0173-0>
7. Vieccelli Donoso MT, Barbosa SAS, Simino GPR, Couto BRGM, Ercole FF, Barbosa JAG. Análise de custos do tratamento de lesão por pressão em pacientes internados. *Rev Enferm do Centro-Oeste Min* [Internet]. 2019 [cited 2021 abr 26]; 9. Available from: <http://seer.ufsj.edu.br/index.php/recom/article/view/3446>
8. Ricci JA, Bayer LR, Orgill DP. Evidence-Based Medicine. *Plast Reconstr Surg* [Internet]. 2017; 139(1):275e-286e. Doi: 10.1097/PRS.0000000000002850
9. Cauduro FP, Schneider SMB, Menegon DB, Duarte ERM, Paz PO,

- Kaiser DA. Atuação dos enfermeiros no cuidado das lesões de pele. *Revista de Enfermagem UFPE*, 2018; 12(10): 2628-2634.
10. Yin RK. Estudo de caso: planejamento e métodos. 3 ed., Porto Alegre: Bookman; 2005.
 11. Stuque AG, Sasaki VDM, Teles AAS, Santana ME, Rabeh SAN, Sonobe HM. Protocolo para prevenção de úlcera por pressão. [Internet]. *Rev Rene*. 2017 [Cited 2019 Apr 19]; 18(2):272-282. Available from: <http://dx.doi.org/10.15253/2175-6783.2017000200018>
 12. Garcia AB, Müller PV, Paz PO, Duarte ERM, Kaiser DE. Percepção do usuário no autocuidado de úlcera em membros inferiores. [Internet]. *Rev Gaúcha Enferm*. 2018.[Cited 2019 Apr 19]; 39:e20170095. Available from: <http://dx.doi.org/10.1590/1983-1447.2018.2017-0095>
 13. Ribeiro GSC, Cavalcante TB, Santos KCB, Feitosa AHC, Silva BRS, Santos GL. Pacientes internados com feridas crônicas: um enfoque na qualidade de vida. *Rev Enferm Foco* [Internet]. 2019 [Cited 2019 Oct 02]; 10(2):70-75. Available from: <http://revista.cofen.gov.br/index.php/enfermagem/article/view/1740/524>
 14. Coqueiro JM, Brito RS. Múltiplos fatores de riscos e estratégias preventivas das úlceras por pressão: revisão sistemática. *Rev de enfermagem UFPE On line* [Internet]. 2013 [acesso em 22 nov 2018]; 7(10): 6215- 22. Disponível em: <https://periodicos.ufpe.br/revistas/revis-taenfermagem/article/download/12259/14893>.
 15. Guerra MJC, Alvim JP, Salles LO, Albergaria RMR, Teixeira JCD, Queiroz AT. Abordagem e tratamento de úlcera de pressão infectada em idosa sob cuidado domiciliar: da atenção primária à especializada. *Revista de Saúde*. 2021; 12 (1): 30-34
 16. Medeiros AD, Oliveira GDM, Vasconcelos SCM, Silva JB, Almeida PF, Alves ESRC. Percepção do enfermeiro sobre a relevância na avaliação e registro das injúrias cutâneas no prontuário do paciente. *Brazilian J Heal Rev* [Internet]. 2020; 3(5):11603–14. Available from: <https://www.brazilianjournals.com/index.php/BJHR/article/view/16053/13144>
 17. Oliveira LSB, Costa ECL, Matias JG, Amorim LLB. Os efeitos da capacitação da equipe de enfermagem sobre avaliação e cuidado de pacientes com feridas. *Brazilian J Dev* [Internet]. 2020; 6(5): 29707–25. Available from: <http://www.brazilianjournals.com/index.php/BRJD/article/view/10404/8797>
 18. Martins NBM, Brandão MGSA, Silva LA, Mendes AMV, Caetano JÁ, Araújo TM de et al. Percepção de enfermeiros de terapia intensiva sobre prevenção de lesão por pressão. *Rev Atenção à Saúde* [Internet]. 2020 Mar 24;18(63). Available from: http://seer.uscs.edu.br/index.php/revista_ciencias_saude/article/view/6270
 19. Costa CR, Costa LM, Boução DMN. Escala de Braden: a importância da avaliação do risco de úlcera de pressão em pacientes em uma unidade de terapia intensiva. *Rev Recien*. 2016; 17 (6):36-44. <http://dx.doi.org/10.24276/rrecien2358-3088.2016.6.17.36-44>
 20. Terra MR, Silva RS, Pereira MGN, Mitrovini C. Enterococcus spp e

Staphylococcus aureus em lesão por pressão. *BJSCR*, 2017; 18(2):141-148.

21. Marquardt C, Koppes P, Krohs U, Mares A, Paglinawan R, Höfer D, et al. Vakuumentherapie mit PHMB Gaze zur Behandlung postoperativer subkutaner Bauchdeckeninfektionen. *coloproctology* [Internet]. 2014 [cited 2021 abr 26]; 36(5):364–9. Available from: <http://link.springer.com/10.1007/s00053-014-0478-1>
22. Alves ILM, Santana LA, Neves RS, Guadagnin RV. A efetividade da Polihexanida (PHMB) na cicatrização de lesão por pressão: um estudo preliminar. *Revista feridas*, 2018; 06(30):1008-1014.
23. Conselho Federal de Enfermagem. Resolução Cofen 160/93. In: *Documentos Básicos do Cofen*. 4 ed. Rio de Janeiro, Cofen; 1996.
24. Brasil. Portaria nº 529, de 1º de abril de 2013. Institui o Programa Nacional de Segurança do Paciente (PNSP). *Diário Oficial da União*, 2013.
25. Rocha SCG, Oselame DG, Mello MGS, Neves EB. Comparação das escalas de avaliação de risco de lesão por pressão. *Rev Bras Pesq Saúde*. 2016; 18(4): 143-151. <https://doi.org/10.21722/rbps.v18i4.16742>
26. Latimer S, Gillespie BM, Chaboyer W. Predictor of pressure injury prevention strategies in at-risk medical patients: an Australian multi-centre study. *Collegian*. 2017; 24 (3): 155-163. <https://doi.org/10.1016/j.colegn.2015.11.00522>.
27. Barakat-Johnson M, Lai M, Wand T, White K. A qualitative study of the thoughts and experiences of hospital nurses providing pressure injury prevention and management. *Collegian*. 2018; 558(2): 1-8. <https://doi.org/10.1016/j.colegn.2018.04.005>
28. Favreto FJL, Betiolli SE, Silva FB, Campa A. O papel do enfermeiro na prevenção, avaliação e tratamento das lesões por pressão. *Rev. Gestão e Saúde*, 2017;17(2):37-47.
29. Lúcio FD, Polleti NAA. Prática diária do enfermeiro atuante no tratamento de feridas. *Cuid Enferm*. 2019; 13(2): 206-208.
30. Conselho Federal de Enfermagem. Parecer nº 04/2016/CTAS/COFEN. Ementa: Manifestação dos procedimentos da área de enfermagem). [Internet]. [citado em 22 jun. 2019]. Disponível em: http://www.cofen.gov.br/parecer-no-042016ctascofen_45837.html
31. Brem H, Kirsner RS, Falanga V. Protocol for the successful treatment of venous ulcers. *The American Journal of Surgery*, 2004; 188:1-8.
32. National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. *Prevention and Treatment of Pressure Ulcers: Quick Reference Guide*. Emily Haesler (Ed.). Cambridge Media: Perth, Australia; 2014.
33. Strohal R, Dissemond J, Jordan O'Brien J, Piaggese A, Rimdeika R, Young T, et al. EWMA Document: Debridement: An updated overview and clarification of the principle role of debridement. *J Wound Care* [Internet]. 2013 Feb;22(Sup1):S1–49. Available from: <http://www.magonlinelibrary.com/doi/10.12968/jowc.2013.22.Sup1.S1>

34. Girondi JBR, Soldera D, Evaristo SM, Orlandi Honório Locks M, Amante LN, De Souza Vieira A. Desbridamento de feridas em idosos na atenção primária em saúde. *Enferm em Foco* [Internet]. 2020 May 25;10(5). Available from: <http://revista.cofen.gov.br/index.php/enfermagem/article/view/2669>
35. Conselho Federal de Enfermagem. Resolução 0567/2018, de 29 de janeiro de 2018. Regulamenta a atuação da equipe de enfermagem no cuidado aos pacientes com feridas. [Internet]. Brasília: COFEN; 2018. [Cited 2019 Apr 19]. Available from: <http://www.cofen.gov.br/wp-content/uploads/2018/02/RESOLU%C3%87%C3%83O-567-2018.pdf>
36. Conselho Regional de Enfermagem de São Paulo. Parecer COREN-SP 002/2015 – CT. Ementa: Prescrição de coberturas para tratamento de feridas por Enfermeiro. [Internet]. [citado em 22 jun. 2019]. Disponível em: <https://portal.coren-sp.gov.br/wpcontent/uploads/2015/04/Parecer%20002-2015%20Prescri%C3%A7%C3%A3o%20coberturas-1.pdf>
37. Conselho Regional de Enfermagem de São Paulo. Parecer COREN-SP CAT N° 013/2009. Assunto: Realização de desbridamento pelo Enfermeiro. [Internet]. 2009 [citado em 22 jun. 2019]. Disponível em: https://portal.corensp.gov.br/sites/default/files/parecer_coren_sp_2009_13.pdf
38. Leal TS, Oliveira BG de, Bomfim ES. Percepção de pessoas com a ferida crônica. *Rev enferm UFPE on line.*, 2017; 11(3):1156-62.
39. Frederico GA, Kolchraiber FC, Sala DCP, Rosa AS, Gamba MA. Integralidade no cuidado de enfermagem às pessoas com úlceras cutâneas. *Rev enferm UFPE on line.*, Recife, 2018; 12(7):1997-2011.
40. Dias TYAF, Costa IKF, Melo MDM, Torres SM da SGS de O, Maia EMC, Torres G de V. Quality of life assessment of patients with and without venous ulcer. *Rev Lat Am Enfermagem* [Internet]. 2014; 22(4):576–81. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-11692014000400576&lng=en&tlng=en
41. Aguiar AC de SA, Sadigursky D, Martins LA, Menezes TM de O, Santos AL de S, Reis LA dos. Repercussões sociais vivenciadas pela pessoa idosa com úlcera venosa. *Rev Gaúcha Enferm* [Internet]. 2016;37(3). Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1983-14472016000300417&lng=pt&tlng=pt
42. Dantas DV. Validação clínica de protocolo de úlceras venosas na alta complexidade. *Revista Gaúcha de Enfermagem*, 2016; 37(4):1-9.

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