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NURSING CARE FOR PATIENTS WITH PRESSURE INJURIES AND KENNEDY TERMINALL INJURIES IN THE INTENSIVE CARE UNIT ENVIRONMENT

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Abstract: INTRODUCTION: integumentary failure is common in cancer patients and/or those who are hospitalized in intensive care units, and even those who are under palliative care or in the process of finitude, giving rise to wounds, which can be caused by the pathology itself or by processes of aggression to the skin resulting from the fragility that people find themselves in due to their neurological state, leading them to immobility in bed or loss of autonomy. OBJECTIVE: To describe the main nursing strategies for preventing pressure injuries in patients who are restricted to bed in intensive care units or other hospitalization units, or even receiving care from the nursing team in primary care. METHO-DOLOGY: Integrative literature review with a qualitative approach, carried out between August and December 2024. RESULTS AND **DISCUSSION:** The studies show the importance of using protocols to prevent PPL in the service, including multi-professional and institutional involvement, that patients who have these skin lesions at the end of their lives have a higher risk of death than patients who do not have PPL, and show that skin inspection, weight control, change of decubitus, hydration, use of special mattresses and hydrocolloids, favor the prevention of these lesions. CONCLUSION: The debate on this topic leads us to reflect on a scientific path based on both skin assessment and the risks of developing PPL, the use of protocols to guide clinical practice and the interventions needed to manage PPL, in order to provide patients with more comfort and quality of life, even if they are already under palliative care or in the process of ending their lives

Keywords: Prevention. Pressure injuries. Nursing. Palliative care.

INTRODUCTION

The loss of skin integrity resulting in lesions known as Pressure Injury (PI) is always a topic of discussion and concern for health professionals, especially nurses. As a profession characterized by care, actions aimed at comfort, well-being, safety, relief of suffering and the ethical and aesthetic commitment of the human being are part of the daily practice of nursing professionals (SANTOS et al., 2011).

Yashchuk (2019) emphasizes that PPLs are a public health problem and considers them to be an indicator of the quality of care provided. They cause suffering and reduce the quality of life of patients and their caregivers, and can lead to death. Geovanini and Junior (2010) are unanimous in stating that prevention is the best plan of action.

The provision of care to patients with serious and/or advanced and progressive diseases with the aim of promoting their well-being and quality of life is an essential qualitative element of the health system (YASHCHUK, 2019). Individual assessment according to the needs and demands of each patient is necessary to seek comfort and quality of life (CARVALHO et al. 2021).

It should be noted that skin failure is common in cancer patients and/or those who are hospitalized in intensive care units, and even those who are under palliative care or in the process of finitude, giving rise to wounds, which can be caused by the pathology itself or by processes of aggression to the skin resulting from the fragility that people find themselves in due to their neurological state, leading them to immobility in bed or loss of autonomy (CARVALHO; AMARAL, 2013).

Thus, among the diseases included in palliative care, there is cancer, one of the main causes of morbidity and mortality worldwide. Thus, Carvalho Et al. (2021) cites Kennedy's terminal lesion that occurs in cancer patients in palliative care, which may indicate the process of finitude of life.

People who reach the end of life can experience a phenomenon called Kennedy's terminal ulcer (KTE). In this period, pressure ulcers appear which can be detected at the end of the dying process; they commonly occur in the sacral region, with a pear, butterfly or horseshoe appearance, with irregular edges. They appear suddenly and the tissue shows progressive and rapid deterioration (CARVALHO; AMARAL, 2013; CARVALHO Et al. 2021).

The loss of skin integrity, occurring in the last hours before death, was first reported by Karen Kennedy (UTK) in 1983, in the sacral area, in an intermediate care unit at Byron Health Center, United States. The ulcer developed despite the preventative measures put in place. In UTK, skin deterioration progresses rapidly, even over the course of a single day. According to Kennedy, caregivers and family members are surprised by the sudden appearance of the ulcer, and the professional team participating in his study noted that this type of injury heralds when death is closest to occurring (CARVALHO; AMARAL, 2013).

From this perspective, the aim of this study is to describe the main nursing strategies for preventing pressure injuries in patients who are confined to bed in intensive care units or other inpatient units, or even receiving care from the nursing team in primary care, because from the survey and organization of this study it will be possible to guide scientifically based care.

METHODOLOGY

The present study is characterized as an integrative literature review with a qualitative approach, carried out between August and December 2024, in which the literature was reviewed to identify scientific production related to nursing care, with an emphasis on Pressure Injury and Terminal Injury of Kennedy in the Intensive Care Unit environment. According to Garuz et al. (2014), an integra-

tive review is defined as an instrument for obtaining, identifying, analyzing and synthesizing literature on a specific topic. The scientific evidence was collected from the following databases: Google Scholar, Repositories using the health descriptors: Prevention, pressure injury, nursing, palliative care. Eleven papers were selected (articles, monographs, dissertations and theses), published between 2014 and 2021, which addressed the topic under discussion and were published in the public domain in national and international electronic databases.

RESULTS AND DISCUSSION

Problems related to the management of skin alterations in clients with advanced disease and/or imminent risk of death include: fragility of the skin around the lesion, excessive exudation, infection, necrosis, odor, bleeding, pain, lack of hygiene and concomitant diseases. Care is aimed at controlling pain and odor, controlling exudate and reducing dressings (FIRMINO, 2011; CARVALHO; AMARAL, 2013; CARVALHO ET AL. 2021).

In order to emphasize the management of preventive care and treatment of LPPs, Table 1 shows the studies with code names and year of publication: A1 (2014), A2 (2016), A3 (2016) and A4 (2017). Which consecutively denote the importance of using protocols for the prevention of PPLs in the service, encompassing multi-professional and institutional involvement, that these patients who present these skin lesions at the end of life have a higher risk of death than patients who do not present PPLs, show that skin inspection, weight control, decubitus change, hydration, use of special mattresses and hydrocolloids, favor the prevention of these lesions, and once LPP is installed (A4) Figueira 2017 mentions the use of topical and alternative therapy to promote debridement and healing.

N°	Database/ Year	Authors	Title	Objective	Nature and type of study	Conclusion
A1	Repository of the University of São Paulo (Brazil)/2014.	Josilene de Melo Buriti Vasconcelos	Construction, Use and Evaluation of the Effects of a Protocol for the Prevention of Pressure Ulcers in an Intensive Care Unit.	To evaluate the effect of the construction and use of a protocol for the prevention of pressure ulcers in an Intensive Care Unit, with the participation of in-service professionals, on nursing actions and the incidence of the event.	Thesis/ Quantitative and qualitative study (pre-in- tervention, intervention and post-in- tervention).	The results show the importance of using the pressure injury prevention protocol in the service and highlight the need for the institution to be involved in maintaining a permanent education program involving the multi-professional team, in providing human and material resources to ensure continuity in the adoption of good practices for pressure injury prevention and in the continuous monitoring of the problem.
A2	Repository of the University of São Paulo (Brazil)/2016.	Ednalda Ma- ria Franck	Skin alterations in palliative care patients at the end of illness and end of life: Prospective cohort.	To identify and analyze the incidence of skin alterations and their predictive factors in hospitalized palliative care patients.	Dissertation/ Prospective cohort study carried out in a palliative care inpatient unit.	An incidence of 16.7% of alterations was found, predominantly pressure injuries. It was also found that patients with these skin alterations at the end of their lives were more likely to die than those without them.
A3	Interdisci- plinary Scien- tific Journal Multiple accesses (Bra- zil)/ 2016.	Luana Corrêa Lima Lamão, Vanilda Araú- jo Quintão, Clara Reis Nunes	Nursing care to prevent pressure injuries	Analyze and verify the methods most used by the nursing team in pressure injury prevention care .	Scientific arti- cle/ Literature review	The main and most effective ways of preventing PI are: skin inspection, weight control, changing the position, along with special mattresses, hydration and the use of hydrocolloids, among others.
A4	Repository of the Federal University of Santa Cata- rina (Bra- zil)/2017.	Tatiana Neves Figueira	Construction of a Nursing Care Guide for the treatment of patients with Pressure Injuries.	Identify evidence of effective products and technologies for the treatment of patients with pressure injuries and, based on this evidence, propose a nursing care guide for the treatment of this type of injury	Dissertation/ Integrative review with a qualitative approach.	The characteristics of the pressure injury according to the current literature, being: Topical therapy to promote healing of the pressure injury; Alternative therapy to promote healing; Topical therapy to promote healing of the pressure injury debridement; topical therapy to minimize contamination of the lesion.

Table 1. Management of preventive care and treatment of pressure injuries from 2014 to 2017. **Source:** Authors (2025).

N	Database/ Year	Authors	Title	Objective	Nature and type of study	Conclusion
A	Reposito- ry of the Federal University of Ceará (Bra- zil)/2018.	Ana Caroli- ne Andrade Oliveira	Pressure injuries in palliative care patients: an integra- tive review	To identify the characterization, prevention and treatment of pressure injuries in palliative care patients in the literature.	Monograph/Integrative literature review	The wounds were characterized as deep, exuding and painful. A unique, individualized approach is required for each patient undergoing PC, as there are numerous risk factors for the development or worsening of a PI. The underlying pathology, associated complications, immobility, incontinence, pain, among other problems, can favor the occurrence of damage. As much as adequate care is implemented and preventive measures are adopted carefully, the appearance of a PI may characterize the brevity of the finitude process, which indicates that there was no negligence or failure in the care provided to the individual.

					Dissertation/ systematic	The systematic literature review found that the etiology is related to hypoperfusion of
A6	Repository of University of Porto (Portugal)/2018.	Marta Filipa de Sousa Maia	Wounds in Palliative Care: Results of a Study on Terminal Ulcers of Kennedy.	Systematize pro- duction published research on UTK (Kennedy's Ter- minal Ulcer).	literature review and exploratory, descriptive and cross-sectional research, which analyzed the knowledge of nurses in Portugal about UTK	the skin, that TKUs appear suddenly and progress rapidly. In exploratory research: The data found supports that nurses' knowledge of UTK is scarce and that more research is needed in the area, allowing for the development of <i>guidelines</i> and treatment protocols, as well as the inclusion of more training to diagnose wounds correctly, set realistic goals and carry out appropriate interventions.
A7	Revista Texto Contexto Enferm / 2018.	Paula Knoch Mendon- ça, Marisa Dias Rolan Loureiro, Oleci Pereira Frota, Albert Schiaveto de Souza.	Pressure injury prevention: actions prescribed by intensive care nurses	To describe the nursing actions prescribed by nurses to prevent pressure injuries and their occurrence in intensive care units.	Scientific article/ a cross-sectional, descriptive and analytical study with a quantitative approach conduct- ed in two teaching hospitals in Cam- po Grande, Brazil.	Drawing up and implementing protocols, monitoring records and groups most at risk are strategies that guide the prescription of appropriate preventive actions for pressure injuries.
A8	Revista Enferm. Foco (Bra- zil)/2019.	Carolina Otto, Beatriz Schu- macher, Luiz Paulo de Lemos Wiese, Carlos Ferro, Raquel Antonacci Ro- drigues.	Risk factors for the development of pressure injuries in critically ill patients.	Identify the relationship between the risk factors for developing a pressure injury and determine its incidence in critically ill patients.	Scientific article/ Descriptive study with a quantita- tive approach	The lesions are multi-causal, It is suggested that prevention and treatment should be carried out through education in the services, with the strengthening of the protocols.
A9	Repository of University of Porto (Portugal)/2019.	Sava Yashchuk	Strategies for preventing pressure ul- cers: integra- tive literature review	To investigate the scientific evidence on the main nursing strategies for preventing pressure ulcers.	Dissertation/ Integrative review	Four categories were identified: Programs and/ or protocols for preventing PI; Use of support surfaces; Risk factors; and Decubitus changes. The study reinforced the importance of imple- menting scientifically-based preventive mea- sures in nursing care.
A10	Research, Society and De- velopment (Bra- zil)/2020.	Graziela Argenti, Gerson Ishikawa, Graziela Argenti, Gerson Ishikawa, Cristina Berger Fadel.	Discrimina- tive capacity of the Bra- den scale in predicting Pressure Injury in the Intensive Care Unit	To assess whether the Braden scale and its com- ponents have a discriminatory capacity in the prognosis of pressure injury development, when applied in intensive care.		with the development of pressure injuries, but with a significant correlation between them.
A11	Research, Society and De- velopment (Brazil)/ 2021.	Carvalho et al.	Skin lesions in oncology palliative care: Ob- servational study	Describe the characteristics of skin lesions such as pressure sores, tumor wounds and terminal ulcers. Kennedy that occur in cancer patients in palliative care	Scientific Article/ Observational, cross-sectional and analytical study with a quantitative approach.	The tumor lesions were malignant ulcerative wounds 32 (44.44%), exudate 50 (69.44%), no odor 46 (63.89%), no necrosis 42 (58.33%), no bleeding 40 (55.56%), staging 3 (31.94%), located on the face (25%), no dressing (33.33%) and dressing frequency once a day 69 (95.83%). In pressure injuries, the characteristics were exudate 22 (56.41%), no odor 28 (71.79%), necrosis 27 (69.23%), bleeding 32 (82.05%), stage II 17 (43.59%), sacral location 25 (64.10%), using hydrocolloid dressing 15 (38,46%) and frequency of dressing once a day (64.10%) and Kennedy's terminal ulcers, exudate 4 (66.67%), odor grade II 3 (50%), necrosis 4 (66.67%), bleeding 4 (66.67%), ischial location 3 (50%), pear shape 3 (50%), using dressing with chlorhexidine and metronidazole 3 (50%).

Table 2. Management of Preventive Care and Treatment of Pressure Injury from 2018 to 2021.

Source: Authors (2025).

At the same time, it should be noted that, as a practical measure, short intervals of changing position of five minutes every two hours are sufficient to prevent the onset of injuries (GEOVANINI E JUNIOR, 2010).

Table 2 shows the scientific studies selected to support the management of preventive care and treatment of PI from 2018 to 2021, organized by codenames from A5 to A11, as shown below:

In the study by A5 (OLIVEIRA, 2018), the appearance of a PPL can characterize the brevity of the finitude process, which indicates that there was no negligence or failure in the care provided to the individual. On the other hand, the study by A6 (MAIA, 2018) found that nurses' knowledge of TKU is scarce and that more research is needed in the area, allowing for the development of guidelines and treatment protocols, as well as the inclusion of more training to correctly diagnose wounds, set realistic goals and carry out appropriate interventions.

A7 (MENDONÇA, LOUREIRO, FROTA E SOUZA, 2018) suggest that the development and implementation of protocols, the monitoring of records and the groups most at risk are strategies that guide the prescription of appropriate preventive actions for pressure injuries. This suggestion is reaffirmed in the study by A8 (OTTO, SCHUMACHER, WIESE, FERRO, RODRIGUES, 2019) that prevention and treatment should be carried out through education in the services with the strengthening of protocols.

However, A9 (Yashchuk, 2019) points out that the main nursing strategies for preventing PI are: programs and/or protocols for preventing PI, use of support surfaces, risk factors and decubitus changes. In the study by A10 (ARGENTI, ISHIKAWA, FADEL, 2020), when analyzing the components of the Braden scale, it was observed that 'Sensory Perception' and 'Activity' stand out as more

associated with the development of pressure injury, in this study the author discusses the discriminative capacity of the Braden scale in predicting Pressure Injury in the Intensive Care Unit, a tool commonly used when patients are admitted to hospital to assess the risk of developing PI.

In an observational study (A11) carried out by Carvalho et al. 2021, with 99 patients from the Ophir Loyola Hospital in the state of Pará, presenting with skin lesions in palliative cancer care, it was found that around 4.04% (4 participants) had terminal Kennedy ulcers, and 95.96% had other types of lesions (95 participants). Also according to the authors, the terminal Kennedy's ulcers evaluated had the following characteristics: exudate, grade II odor, necrosis, bleeding, location in the dorsal spine, sacral and ischial region, as for the shape: butterfly, horseshoe and pear, as for the dressing it was performed with degerming chlorhexidine, metronidazole, Vaseline, 0.9% saline solution, hydrogel, hydrocolloid. The dressings were changed once a day and every 7 days. The patients with Kennedy's Terminal Ulcers died after an average of 12.5 days, and the longest-lived patient lived for 29 days.

It should be emphasized that each client with a wound should receive care according to their peculiarities in an individualized way. To this end, Silva et al. (2011) cite that "systematic nursing records, using appropriate language regarding the observation and inspection of skin integrity, are the main instrument for preventing other injuries", as well as for treating existing ones, helping to guide therapy.

CONCLUSION

As can be seen, the debate on this topic leads us to reflect on a scientific trajectory based on both skin assessment and the risks of developing PPL, the use of protocols to guide cli-

nical practice as well as the interventions needed to manage PPL, in order to provide more comfort and quality of life for patients, even if they are already under palliative care or in the process of ending their lives.

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