The profile of patients with neoplastic wounds and nursing care: A cross-sectional study

https://doi.org/10.56238/globalhealthprespesc-076

Raquel de Souza Smith
Fluminense Federal University, Post-Graduate Program graduation in Health Care Sciences, Niterói-RJ, Brazil.
Orcid: https://orcid.org/0000-0003-1200-4837
E-mail: raqsoutav@gmail.com

Daianny Arrais de Oliveira da Wedge
Fluminense Federal University, Post-graduation in Health Care Sciences, Niterói-RJ, Brazil.
Orcid: https://orcid.org/0000-0003-2109-319X

Aretha Pereira de Oliveira
Fluminense Federal University, Doctoral Program in Cardiovascular Medicine, Niterói-RJ, Brazil.
Orcid: https://orcid.org/0000-0003-1549-7729

Patricia Claro Fuly
Fluminense Federal University. Teacher (PHD), of the program of Post-Graduation in Health Care Sciences, Niterói-RJ.
Orcid: https://orcid.org/0000-0002-0644-6447

ABSTRACT
Objectives: to identify the clinical characteristics of patients with neoplastic wounds admitted to the palliative care unit and discuss nursing care applied to this patient. Methods This is a cross-sectional, prospective and descriptive with quantitative approach. Data collection was performed at the palliative care of the National Cancer Institute (INCA IV), located in Rio de Janeiro January-RJ. Results: for the analysis of the characteristics a sample of 35 was evaluated patients who were hospitalized in the ward at the time of the research. In relation to the gender variable did not present statistically significant difference in males and female, as for the age variable, there was a clientele over 60 years of age, with low performance status (impaired functional capacity), very advanced, especially in patients with female breast carcinomas and Head and Neck Carcinomas in males. In the evaluation of the wound, it is observed the importance of knowing the clientele in order to follow the care planning. From the profile found, advanced staging is a complicating factor because the more profoundly increased the risk of bleeding and impairment of nerve endings, which demands conducts to control pain and hemorrhage. And as for the odor, it's It is important to note that this symptom is one of the most bothersome for patients and. Therefore, to minimize it is important an effective control of the local microbiota, the proper management of cleaning solutions, coatings and environmental aromatizers.

Keywords: Wounds and injuries, oncology nursing, palliative care.

1 INTRODUCTION

The neoplastic wound presents in about five to ten percent of patients with advanced cancer in the last six months of life. These lesions may arise from primary tumors or even metastases, mainly present in the age group of 60 to 70 years [1,2]

Patients with wounds carry with them great stigma, from late-stage and exposed cancer on the skin. The injury causes damage to the quality of life of the patient, due to the exophytic characteristics, mainly such as pain, odor and exudate [3,4], affecting the daily life due to the great demand for care

concomitant with the social and psychological impacts. Social isolation, for example, is associated with the strong, nauseating odor characteristic of the tumor. [5]

It is possible to observe that palliative nursing care goes far beyond wound care, it is about providing care based on the multiple dimensions of the individual (physical, psychic, social, spiritual and family of the patient), in order to improve their quality of life during their last days, since the patient who lives with advanced oncological disease and presents neoplastic wound has a high degree of vulnerability in the dimensions that integrate him as a being human. [2] The palliative view envisions no cure, but quality of life and the promotion of comfort.

A better understanding of the characteristics of patients with wounds and the evidence is important to support nursing care in oncology, especially for patients in palliative care with cancer. The literature is still scarce on this theme.

The delimitation of the objective of the study envisages to analyze the clinical characteristics of the patient with neoplastic wound hospitalized in the palliative care unit and its implications for oncological nursing care. To support the study, the following questions are asked: what are the implications of the clinical profile of patients with neoplastic wounds in palliative care for oncology nursing care?

2 METHOD

This is a cross-sectional, prospective and descriptive study with a quantitative approach. Data collection was carried out over three months, in the hospitalization sector of the palliative care unit of the National Cancer Institute (INCA IV), based in the neighborhood of Vila Isabel, in the city of Rio de Janeiro-RJ.

The inpatient sector is composed of 56 active beds, maintaining an average operational occupancy of around 70%. Being a sector of high turnover, since the objective is that the patient recovers and returns to the conviviality of the family. But in some cases, patients end up hospitalizing and staying in the unit for end-of-life care.

This study is an excerpt from the master's thesis entitled: "The bacteriological profile and the variables associated with neoplastic wounds", concluded at the Academic Graduate Program of Sciences in Health Care of the Fluminense Federal University in February 2020.

To compose the non-probabilistic and consecutive sample, 35 patients were recruited, who fit the profile of the research. The eligibility criteria were: having a malignant solid tumor of any size; wound staging equal to or greater than 1N; admitted to the unit for at least 24 hours, aged 18 to 90 years. Exclusion criteria were: patients with tumors with active bleeding, no apparent lesion on the skin and with wounds in genitourinary areas.

The sociodemographic and clinical variables analyzed were: gender, age group, kps, types of tumors, staging and odor.

The data were submitted to simple frequency analysis, using the Excel 2010® program and compared with the literature with a view to the objective of the research

The research was conducted respecting the ethical principles of research with human beings, according to Resolution No. 466/2012 of the National Health Council. The study was approved by the Research Ethics Committees of the Fluminense Federal University School of Nursing (Opinion No. 2,810,432) and the José Alencar Gomes da Silva National Cancer Institute (Opinion No. 2,895,106).

3 FINDINGS

The study included a sample of 35 patients admitted to the palliative care unit composed of 56 inpatient beds, who met the eligibility criteria. Patients who were in end-of-life care and presented complications during collection, such as bleeding in tumor lesions, were excluded from the sample.

When the percentage of patients with neoplastic wounds was analyzed in relation to gender, there was no statistically significant variation, approximately fifty percent were female (n=18) and male (n=17).

The types of tumors found were: melanomas, sarcomas, carcinomas of the breast, head and neck and vulva. Head and neck cell squamous carcinomas presented a percentage of 43% (n=18) and breast carcinomas 34% (n=12). Still found in a lower percentage melanoma tumor (n=1), with 3% and sarcomas (n = 1), with a percentage equal to 3% and vulvar carcinomas with 7%. In the sixth-rate distribution, tumor/sex distribution table is represented below:

Table 1

Distribution of patients by age group by sex			
Age group	**Gender F**	**Gender M**	**TOTAL**
30-40	1	4	5
41-51	3	4	7
52-62	5	5	10
Over 62	9	4	13

Source: Own (2022)

The analysis of the age group was classified into 4 categories: 30-40 (n = 5), 41-51 (n = 6), 52-62 (n = 10) and above 62 (n = 15). According to Table 2:

Table 2

Distribution of tumor type by sex			
Types of tumors	**Gender F**	**Gender M**	**Total**
breast cancer	12	0	12
CEC head and neck	3	15	18
melanomas	1	0	1
sarcomas	0	2	2
Vulvares carcinomas	2	0	2
Total	18	17	35

Source: Own (2022)

Another aspect analyzed in the study was the Performance Status of each patient, through the Karnovfsky Scale (Kps). Of the results found, with KPS 10-20: 7 patients, kps of 30-40 were 22 patients and KPS of 50-60 only 6 patients.

Odor is a symptom that can be classified into three grades: I, II and III. Odor grade I is classified as weak, felt only when opening the dressing, odor grade II felt with open dressing and odor grade III classified as strong and nauseating, felt at a distance from the patient and with closed dressing. Regarding the criterion of odor presence, the 3 grades (I< II< III) were evaluated. As for the grade I odor, felt when opening the dressing, a rate of 51% was identified with the patients, followed by the grade II odor, characterized by being felt even without opening the dressing, with a percentage in 34% of the patients, and grade III, a strong and nauseating odor, in 15% of the sample).

Staging is a classification to measure the layers of skin affected by the tumor. In staging 1, the lesion presents only as a nodule without opening of the epidermis, in staging 1N there has already been rupture of the epidermis and small exposure, still very superficial. On the other hand, stages 2 and 3 have larger lesions, with involvement of the dermis and connective tissue, respectively. They already have a large amount of exudate and present odor. The most serious, however, is stage four when the lesion already affects the bone and muscle structure.[1]

For staging there was a predominance of classification 3, according to the following results follow the entire distribution of Staging: 1N (n = 4 / 11%), 2 (n = 4 / 11%), 3 (n = 19 / 54%) and 4 (n = 8/ 22%).

4 DISCUSSIONS

It is worth mentioning that one of the weaknesses of the study, time is the issue of the finitude of the patients of the unit, given that because it is a specific place totally focused on exclusive palliative care, there is naturally an impact on the recruitment of participants.

Neoplastic wounds are lesions caused by tumor cells that infiltrate the basal layer of the skin, rupture the epidermis and externalize. The accelerated cell growth leads to a deficit of local oxygenation, leading to tissue death and emergence of areas of necrotic tissue [(1)]. It then becomes a

propitious site for the growth of bacteria with worsening symptoms such as pain, odor and the presence of exudate. [1.4]

In the present study, patients hospitalized with neoplastic wounds, in relation to the gender variable, had a similar percentage, with about 50% each, with no statistical difference. The predominant tumor wounds in females are due to advanced breast cancer. Breast cancer is the most prevalent in women in the world, with approximately 2.3 million new cases estimated in 2020, which represents 24.5% of new cancer cases in women. It is also the most frequent cause of death from cancer in this population, with 684,996 deaths estimated for this year (15.5% of cancer deaths in women) (6).

Early detection is a primary factor for cure, but for this it is necessary that women over 40 years of age undergo mammography. Unfortunately, late arrival at the health service, difficulty in scheduling exams, and difficulty in obtaining treatment make it impossible to cure, and patients suffer from malignant neoplastic lesions and multiple metastases caused by breast cancer. [2.7]

The most common advanced male tumors, on the other hand, are predominantly located in the head and neck region. Head and neck tumors (PC) have an incidence of 70% in males, especially in men over 40 years of age, and are associated with risk factors such as alcohol use and smoking. Accordingly, with breast cancer cases detected early have an eighty percent chance of cure. [8.9]

As for the age of patients with neoplastic lesions, there is a predominance of the age group above 50 years. It is known that age is a predictive factor for the onset of cancer, the older the age increases the ability to have errors in cell multiplication and decreases the body's ability to identify cellular errors, destroying cancer cells. Another relevant aspect is the fact that the cancer treatment itself is more difficult in advanced ages, because chemotherapy drugs reach not only tumor cells, but also healthy ones causing effects such as renal, cardiac and pulmonary toxicity [9]. Thus, it is a difficult management of treatment to achieve a cure for the disease in patients with more advanced ages, especially if associated with multiple comorbidities.

Another aspect analyzed was the Performance Status of patients with neoplastic wound. The Karnofsky performance status scale is used to measure the ability to perform the activities of daily living of patients in palliative care, with a performance rating of 10 to 100, with 10 being the measure for dying patients, and 100 corresponding to the patient without complaints, or without any daily activity disorder. [10]

In the study, a predominance of the KPS scale was observed between 30-40, compatible with an inability to self-care, requiring a lot of assistance. The neoplastic wound is related to advanced disease mainly in the last months of life. The deterioration of KPS quantification occurs naturally with the progression of neoplastic disease. The more the KPS decreases, the greater the workload of the nursing team. In a study conducted in an oncology unit, the NAS (Nursing Activies Score) was used

to measure the workload and demonstrated an association of increased demand for nursing care with the decrease in KPS. [11]

The nursing care most present in palliative care are: control of dyspnea, control of hemorrhages, pain monitoring, gastrointestinal disorders (abdominal distention, vomiting, diarrhea or constipation), emotional support to the patient and family with monitoring of the grieving process and dressings of neoplastic wounds. [12.13]

Regarding the types of tumors most present in the formation of neoplastic wounds found in the study, we highlight the following: carcinomas, subdivided into breast carcinomas and cellular squamous cell carcinomas. Carcinomas are tumors of malignant etiology, with a high capacity for metastasis formation, when discovered late. [9] On the other hand, squamous cell carcinoma, present mainly in patients with head and neck tumors, is externalized to form wounds because they are close to the subcutaneous tissues. Similarly, breast carcinoma due to its location in the underlying epidermal tissue favors the appearance of lesions when the tumor is not treated early. [7] In addition to neoplastic wounds originating from primary or metastatic tumors as already described above, these can also occur from an accidental implantation of cells in the skin during a surgical procedure or diagnosis or even by the invasion of lymph nodes.

Tumor wounds require great expertise from nurses, because they do not follow the same principles as other lesions. This type of wound is only healed by surgery, chemotherapy and radiation therapy. Wound care focuses on minimizing the associated symptoms, which are: odor, pain, bleeding, infection, and exudate. [14,15] To perform the dressing, the INCA clinical protocol is used, in which the nurse must classify, estade, measure the degree of odor and describe bleeding, exudate and infection, and from this trace the conducts to be performed and the appropriate coverages. [1]

For example, in the study the most prevalent odor grade in the study was grade I (51%) followed by grade III (34%) and grade II (15%). This is one of the most bothersome symptoms, which can affect the patient's self-esteem and disrupt their social life, often leading to social isolation. [3] The higher the degree, the stronger the odor. The odor symptom is associated with the presence of anaerobic and aerobic bacteria, existing in the area of the lesion. Thus, the treatment of odor can be local, systemic or environmental, including: infection control with the use of topical and systemic antibiotics or natural products, removal of necrotic tissue, and use of flavorings from environments [15] In the institutional protocol the use of metronidazole for Grade III odor is recommended. [1]

Other coatings are also indicated for odor control, such as the use of silver coatings, activated charcoal and Phmb gel and liquid. The change time routine will depend on the product used being every 24 hours (e.g., metronidazole) up to 72 hours (phmb, foams impregnated with silver and activated carbon). And as a recommended cleaning solution, saline, distilled water and phmb solution can be used14.

Another important aspect is the evaluation of the microbiota that grows in the lesion through the Swab exam, in order to determine bacterial resistance and biofilm, so that antibiotics can be used more assertively. [15]

Regarding the percentage of staging, the study reflects a predominance of staging 3, which implies very advanced lesions, with deep tissue involvement and a high amount of exudate. The care of injuries in this dimension requires great expertise from the nursing team because it already compromises blood vessels and produces symptoms that are difficult to control, such as bleeding and pain. To control bleeding, it is recommended the use of cold saline, application of calcium alginate, hemostatics, and application of gauze with local adrenaline in a compressive way.

Pain should be measured before and after dressing, and it is important to perform local and systemic analgesia at all times. The exposure of nerve endings, caused by the deepening of the wounds makes the region extremely sensitive. [1] Systemic analgesics should be in accordance with the patient's need, and may be opioids or anti-inflammatory drugs. And for local use lidocaine gel with pre-dressing, remembering that you should let the product act 3 to 5 minutes before the change. [12.15]

5 CONCLUSIONS

The profile of the patients was similar in the gender variable, but an elderly clientele with low performance status stood out, which is consistent with high dependence and greater demand in nursing care.

In the evaluation of the wound, it is observed the importance of knowing the clientele to follow the care planning. From the profile, advanced staging is a complicating factor that draws attention, because the deeper the greater the risk of bleeding and impairment of nerve lesions, which require conduct for pain control. And as for the odor, it is important to emphasize, this symptom as one of the most uncomfortable for patients and therefore, an effective control should be performed, associating the identification of the microbiota present and more assertive antibiotic therapy measures

REFERENCES

1. TRATAMENTO E CONTROLE DE FERIDAS TUMORAIS E ÚLCERAS POR PRESSÃO NO CÂNCER AVANÇADO Série Cuidados Paliativos [Internet]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/inca/Feridas_Tumorais.pdf

2. Silva e Silva EV, Conceição HN da. CUIDADOS PALIATIVOS DE ENFERMAGEM A PACIENTES COM FERIDAS NEOPLÁSICAS. Espaço para a Saúde - Revista de Saúde Pública do Paraná [Internet]. 2020 Jul 1;21(1):82–94. Available from: https://docs.bvsalud.org/biblioref/2020/07/1104425/08-693-1752-2-ed_revisado_portugues16194-1pdf-cuidados-paliati_hAKhF9N.pdf#:~:text=Os%20cuidados%20paliativos%20de%20enfermagem%20em%20pacientes%20com%20feridas%20neopl%C3%A1sicas.

3. Souza MA de O, Souza NR de, Melo JT da S, Xavier MACA, Almeida GL de, Santos ICRV. Odor evaluation scales for odor in neoplastic wounds: an integrative review. Revista Brasileira de Enfermagem [Internet]. 2018 Oct [cited 2021 Oct 12];71(5):2552–60. Available from: https://www.scielo.br/j/reben/a/ysLnzMdX6F9QgwZMGGyQkKh/?format=pdf&lang=pt.

4. Santos WA dos Fuly PDSC, Santos MLSC dos, Souto MD, Reis CM, Castro MCF de. Avaliação do isolamento social em pacientes com odor em feridas neoplásicas: revisão integrativa. Revista de Enfermagem UFPE on line [Internet]. 2017 Feb 8;11(3):1495–503. Available from: https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/13995.

5. Caldeira Brant JM, Teodora da Silva LH. Efetividade do metronidazol tópico e/ou sistêmico no controle do mau odor de tumores malignos fétidos: revisão sistemática. Revista da Faculdade de Odontologia de Porto Alegre. 2021 Aug 9;62(1):121–8.

6. Conceito e Magnitude [Internet]. INCA - Instituto Nacional de Câncer. 2018. Available from: https://www.inca.gov.br/controle-do-cancer-de-mama/conceito-e-magnitude

7. Introdução [Internet]. INCA - Instituto Nacional de Câncer. 2019. Available from: https://www.inca.gov.br/estimativa/introducao

8. Lisboa IND, Valença MP. Caracterização de Pacientes com Feridas Neoplásicas. Estima – Brazilian Journal of Enterostomal Therapy [Internet]. 2016 Apr 7;14(1). Available from: https://www.revistaestima.com.br/index.php/estima/article/view/116

9. ESCALA DE KARNOFSKY [Internet]. Available from: https://dms.ufpel.edu.br/static/bib/apoio/escala_de_karnofsky.pdf

10. Fuly P dos SC, Pires LMV, Souza CQS de, Oliveira BGRB de, Padilha KG. Nursing workload for cancer patients under palliative care. Revista da Escola de Enfermagem da USP [Internet]. 2016; 50:792–9. Available from: https://www.scielo.br/j/reeusp/a/JDs7pZvymZyhTGGsBXdPq8s/?lang=en.

11. Manual de Cuidados Paliativos ANCP Ampliado e atualizado 2ª edição [Internet]. Available from: http://biblioteca.cofen.gov.br/wp-content/uploads/2017/05/Manual-de-cuidados-paliativos-ANCP.pdf

12. AÇÕES DE ENFERMAGEM PARA O CONTROLE DO CÂNCER 3ª EDIÇÃO REVISTA, ATUALIZADA E AMPLIADA [Internet]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/acoes_enfermagem_controle_cancer.pdf

13. MINISTÉRIO DA SAÚDE Instituto Nacional de Câncer (INCA) [Internet]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/abc_do_cancer.pdf

14. Soares RDS, Oliveira da Cunha DA de Fuly PDSC. Cuidados de enfermagem com feridas neoplásicas. Revista de Enfermagem UFPE on line. 2018 Dec 2;12(12):3456.

15. Soares R de S, Oliveira AP de, Cunha DA de O da, Guimarães TM, Fuly P dos SC. Perfil bacteriológico e variáveis da ferida neoplásica em pacientes em cuidados paliativos: estudo transversal. Research, Society and Development [Internet]. 2020 Jul 8;9(8): e370985460–0. Available from: https://rsdjournal.org/index.php/rsd/article/view/5460