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SIDE EFFECTS OF IMMUNOSUPPRESSIVE THERAPY IN THE PERCEPTION OF CANCER PATIENTS

EFEITOS COLATERAIS DA TERAPIA IMUNOSSUPRESSORA NA PERCEPÇÃO DE PACIENTES ONCOLÓGICOS

EFFECTOS SECUNDARIOS DEL TRATAMIENTO INMUNOSUPRESORA EN LA PERCEPCIÓN DE PACIENTES CON CÁNCER

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ABSTRACT

Objective: analyzing the perceptions of cancer patients about the side effects from immunosuppressive therapy. **Method:** a descriptive study with a qualitative approach, in a Center for High Complexity Oncology, Northwest of the State of Rio Grande do Sul, with 34 individuals undergoing cancer treatment. For the data production, it was used open interview. Information analysis has been as precepts of thematic analysis which emerged a category. The research project was approved by the Research Ethics Committee, Opinion 139/2008. **Results:** the subjects identified as side effects symptoms were: diarrhea, nausea, emesis, constipation for some, digeusia, fatigue, bleeding, decreased libido, and alopecia, and paresthesia, proneness to infections, photosensitivity, and allergic reactions. **Conclusion:** it appears that it is essential to the performance of the healthcare professional, concomitant to treatment, the implementation of an individualized care plan. **Descriptors:** Chemotherapy, Radiotherapy; Immunosuppression; Therapeutics.

RESUMO

Objetivo: analisar percepções de pacientes oncológicos acerca dos efeitos colaterais decorrentes de terapia imunossupressora. **Método:** estudo descritivo, de abordagem qualitativa, em um Centro de Alta Complexidade em Oncologia da região Noroeste do Estado do Rio Grande do Sul, com 34 indivíduos submetidos a tratamento oncológico. Para a produção dos dados, foi utilizada entrevista aberta. A análise das informações deu-se conforme preceitos da análise temática da qual emergiu uma categoria. O projeto de pesquisa teve aprovação no Comitê de Ética em Pesquisa, parecer 139/2008. **Resultados:** os sujeitos identificam como de efeitos colaterais quadros de diarreia, náusea, êmese, para alguns, constipação, digeusia, fadiga, hemorragias, diminuição da libido, alopecia, parestesia, propensão a infecções, fotossensibilidade e reações alérgicas. **Conclusão:** constata-se que é indispensável à atuação do profissional de saúde, concomitante ao tratamento, a implementação de um plano de cuidados individualizado. **Descritores:** Quimioterapia; Radioterapia; Imunossupressão; Terapêutica.

RESUMEN

Objetivo: analizar las percepciones de los pacientes con cáncer sobre los efectos secundarios de la terapia inmunosupresora. **Método:** un estudio descriptivo, con abordaje cualitativo, en un Centro de Alta Complejidad Oncología en el Noroeste del Estado de Rio Grande do Sul, con 34 personas sometidas a tratamiento contra el cáncer. Para la producción de datos se utilizó la entrevista abierta. El análisis de la información proporcionada conforme a los preceptos del análisis temático del cual surgió una categoría. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, Opinión 139/2008. **Resultados:** los sujetos identifican como efectos secundarios: la diarrea, náuseas, vómitos, estreñimiento para algunos, digeusia, fatiga, sangrado, disminución de la libido, la alopecia, parestesia, la propensión a las infecciones, reacciones de fotosensibilidad y reacciones alérgicas. **Conclusión:** parece que es esencial para el desempeño del profesional de la salud, concomitante al tratamiento, la implementación de un plan de atención individualizada. **Descritores:** Quimioterapia; Radioterapia; La inmunosupresión; Terapéutica.

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INTRODUCTION

Cancer is a public health problem, considered the second cause of death in the Brazil. According to the guidelines of the National Cancer Institute - INCA, estimated that for the next years 489 270 thousands of new cases of cancer could occur in the country, and, approximately, 49 240 thousands of these cases would be breast cancer, and 60 180 thousands prostate cancer. The estimated new cases for 2012-2013 is 518 510 in Brazil, including cases of non-melanoma skin cancer, which is the most frequent in both genders, with 134 000 new cases, followed by prostate cancer (60 000) type, female breast (53 000), colon and rectum (30 000), lung (27 000), stomach (20 000) and cervical (18 000).¹

Beyond the severity of the disease, it is often diagnosed late and patients affected by cancer, treatment and shall undertake, among them, sometimes needing drugs or ionizing radiation.

When needed chemotherapy, this being a systemic treatment reaches indiscriminately all cells of the body. Thus, triggering unwanted side effects, which are related to the health of the individual, disease staging, as well as the drugs used. The most common effects include myelosuppression, nausea, vomiting, diarrhea and alopecia.²

The side effects of radiotherapy are related to radiation dose, route of administration, the extent and location of the area to be irradiated, the quality and power of penetration of radiation and individual patient factors.³

Side effects are typical of the pharmacological action of the drug and may step up under the influence of variables such as age, sex, tumor type, duration of treatment and drugs used.⁴

It is important that the patient will undergo treatment receive information about it, in order to find positive ways to cope with this process by providing effective treatment adherence. In this sense, it is up to the health team design, carefully, a care plan which considers the social and economic condition of the patient.

The choice of subject is justified by the problems presented. In this sense, it is necessary that health professionals, especially nurses, implement actions in health education with this population group, aiming to equip patients and families with a view to providing better quality of life, and minimize complications arising from treatment.

Given the considerations the study aims to:

- Analyzing perceptions of cancer patients about the side effects from Immunosuppressive Therapy.

METHOD

This is a descriptive qualitative study with 34 patients defined by the method of exhaustion, selected randomly, as available in cancer treatment center in a High Complexity Oncology (CACON) in a city in the Northwestern Region of Rio Grande do Sul. The inclusion criteria were: age over 18 years old, having been diagnosed with cancer, have completed or are undergoing chemotherapy and/or radiotherapy and guided and self halopsychically.

The production of data were collected through open interviews, recorded on audio-tape and transcribed in the months of August and September 2008, from three guiding questions:

- 1) What type of treatment you are performing/has performed?
- 2) What are the side effects that you present/presented with the treatment?
- 3) Tell me about the treatment that has been performed/is being performing.

The analysis of the information was given as precepts of thematic analysis,⁵ resulting in a category.

Regarding ethical aspects the project was submitted to the Research Ethics Committee of Unijuí, being approved by the opinion embodied n. 139/2008. The subjects were identified by the letter E followed by the sequential number of the interview.

RESULTS AND DISCUSSION

Of the participants in the study, 14 were female and 20 were male. Ages ranged from 28 to 78 years old, 19 were undergoing chemotherapy and 15 radiotherapy treatments. After the analysis process, emerged the following category:

♦ Side effects of immunosuppressive drugs resulting in the perception of patients

The side effects of anticancer therapy are identified and experienced by most patients undergoing this. In this sense, it is the health care team, especially nurses, trigger educational activities aiming to positive coping in the treatment process. Knowledge of side effects facilitates understanding of the issues presented, providing nursing staff allowances for adequate interventions.⁶

In the account of individuals who participated in the research perceives the knowledge your knowledge about the disease and the therapeutic modalities that comes to submitting as well as possible to be achieved with therapy outcomes.

There are 20 sessions of radiotherapy. The radiation was first on the right, held 20 sessions, and now I do the left side. Make a range for the person to recover. So now I'm doing the left side. (E1)

The report reveals the importance of education in relation to the treatment the patient is performing a part of the context in which it is inserted, since its degree of insight, their family and social relationships and their personal interest in the pathology and treatment. This set allows identifying the knowledge and strategies for interventions that the patient looks to the contemplation of your needs. These may be the search for the alleviation of signs and symptoms of treatment, maintain a stable social relationships and quality of life.

Also discussed is the understanding of the interviewee in relation to its treatment. This is due to effect of educational activities, in caring for the established communication between staff and patient. Communication integrates care, becoming an important tool in nursing practice, promoting the interaction with the patient. Contributes to an effective relationship in which the nurse provides information, support and comfort. Thus, communication between staff and patients is present at all times of care, including verbal and non-verbal.⁷

Lack of patient knowledge regarding treatment may be related to inadequate management of side effects produced by the same and hence exacerbating the symptoms,⁸ as reported.

Nothing happened, and also does not hurt [...] I had drowsiness, and now is decreasing slightly [...]. (E2)

[...] Was the radio itself, after the nurse came to tell me. But agent never expect [...] (referring to diarrhea). (E3)

Chemotherapy and Radiotherapy are treatments for most patients, which interfere in some way in their social relationships. Patients undergoing chemotherapy need of nursing care to assist them in resolving basic needs, or even to help them adapt to the limitations of the treatment.⁹ Is emphasized as well the importance of care planning, providing improved quality of life of patients as speeches.

Gave me a lot of diarrhea, but had walked me about it. (E1)

[...] The head nurse had informed me of radiotherapy [...] will drop the hair. That this now is starting with 50% of treatment. [...] (E4)

These symptoms were also identified, with great frequency in studies of patients with colorectal cancer, these being the most frequent toxicity nausea (42%), followed by diarrhea (38%).³

The side effects of immunosuppressive therapy can be varied depending on the drug, duration of exposure, psychosocial factors, among others. In this context, several research subjects reported some type of toxicity, including nausea and vomiting were the most observed and reported.

After chemotherapy gave me vomit, very sick, nothing looked good to me [...]. (E5)

[...] Chemotherapy gives a bit of sickness in people. I got a bit with nausea cause of the food [...] (E6)

Nausea and vomiting are common side effects, but when intense, compromise nutritional status, hydroelectrolyte and quality of life of the patient. The incidence of nausea and vomiting in this type of treatment relates to the emetic potential of each drug. Therefore, it is important to know the characteristics of the medication on its peak and range of occurrence.¹⁰

Studies with patients with colon cancer in immunosuppressive treatment, identified nausea as the most common symptom (70.5%), peaking in the fourth and fifth day of the treatment cycle.⁸

Regarding side effects on oral mucosa, only one respondent mentioned stomatitis, being referred to as "sore mouth".

The wound in the mouth appeared concomitant with the use of chemotherapy [...] (E7)

The oral mucosal generally occur after immunosuppressive treatment, causing a decrease in oral intake, increased periodontal disease, social discomfort and predisposition to infections. Its occurrence is due to organic weakness, decreased food intake, drug use, anxiety, dry mouth and local tumor.¹

The manifestations in the oral mucosa can lead to infections, which are maintained by the imbalance of the immune system, especially leukopenia. The damage to the salivary glands leads to reduction in flow and changes in the composition of saliva and its pH, which is followed by changes in the oral microflora, increasing the risk of infection.¹⁰

Studies in patients with head and neck cancer showed that the most common side effects of radiotherapy in these patients are pain in the mouth (40,6%), difficulty of

swallowing (50%), nausea (28,1%), sore throat (34,4%), upset stomach (25%), sticky saliva (75,1%), difficulty in taste (72%), decreased of appetite (37,6%), vomiting (12,5%), hoarseness (34,4%) and difficulty in chewing (9,3%).¹¹

To cause metabolic changes, immunosuppressive treatment may alter the functioning of the gastrointestinal system, triggering diarrhea, or even constipation, according speeches.

[...] Did not have diarrhea; instead, I got constipation. (E8)

[...] I had diarrhea and sometimes locks everything. (E7)

Nausea, vomiting and diarrhea, as effects of immunosuppressive therapy, are the most weaken the cancer patient, besides being frequently mentioned as contributing factors to noncompliance with treatment.⁸ As for diarrhea, 75% of patients undergoing chemotherapy show it.¹²

The changes caused by treatment alter physiological functions of the patient. Complications in the gastrointestinal tract impair the nutritional status of the same, as they interfere in your food taking it often anorexia.

My taste has changed a lot, I no longer feel the taste of certain foods, and I stopped eating a lot, because I no longer have that flavor. (E9)

Anorexia is the second most frequent symptom in patients with advanced cancer, present in 65% to 85% of cases, thus interfering in the quality of life, because the appetite and food intake are essential factors for the maintenance of this.¹ The loss of appetite is related to many symptoms of immunosuppressive therapy, such as: xerosthomy, dysphagia, depression, loss of taste, nausea and mucositis.⁴

Several participants of this research identify as a side effect of treatment, fatigue, being named as weakness. It is also recognized as lack of energy, sleepiness, cognitive impairment, mood disorders or muscle weakness.

I'm a very big weakness throughout the body [...]. (E7)

I feel very weak; I am one week so weak and then it passes. (E10)

Fatigue is a debilitating and chronic symptoms persisting for months to years after the end of chemotherapy.¹² Study identifies that fatigue is significantly associated with various physical, biological and behavioral factors. It is one of the most prevalent symptoms in cancer patients, being reported by 50% to 90% of patients which impacts on

quality of life and decreases the functional capacity in daily activities of patients.¹²

Myelosuppressive drugs have the ability to affect the function of the bone marrow, leading to a reduction in the number of cells, such as erythrocytes, neutrophils and platelets.¹³ Accordingly, research participant reported bleeding episodes, which may be related to thrombocytopenia which favors bleeding.

I was two weeks bleeding anally, this has never happened [...] I did three or four sessions of radiotherapy, al lost a lot of blood [...]. (E3)

The most serious consequence of thrombocytopenia is the risk of bleeding, which is controlled by the platelet count. Important to minimize the risk informing the patient for signs and symptoms such as petechiae, ecchymosis, bruising, bleeding, headache, hypotension and melena and hematuria.¹¹

Among the various changes in the body of the individual, caused by immunosuppression, there is the risk for infections, including E4; it highlights the flu.

Meanwhile I got flu [...]. (E4)

So important for the treatment is to be attentive to the effect of it; identifying their problems. For both, the professional caregiver must seek a balance between advantages and disadvantages of treatment.¹⁴

Another symptom reported by respondents was the myalgia and paresthesia in the arms and legs, according to reports.

[...] I felt a lot of pain from the knee down, until a few days ago I was in pain, it hurt me very bones [...]. (E11)

[...] I do not have the courage to pick up the phone on the nightstand to fit in so badly that I was ... is pain in the body, is not having the will to live. (E13)

Occur many disorders linked to neurotoxicity induced by chemotherapy; the symptoms may be transient and / or severe such as paresthesia, tingling, numbness in the extremities, decreased deep tendon reflexes, pain in the jaw and neck, muscle weakness, muscle pain and impotence.¹⁰

Some drugs can cause changes in reproduction and sexuality, leading to a decrease or stagnation of ovarian or testicular function, irregular menstrual cycle and temporary amenorrhea, decreased libido, among other.¹¹ Testimony that relates to decreased libido.

[...] I lost the urge of sex [...]. (E11)

The same is often the treatment and can be attributed to fatigue, anxiety related to the disease and treatment, changes in self-

image and hormonal imbalances, due to chemotherapy.¹¹

For the same author, in the face of numerous known reactions of immunosuppressive therapy, are also systemic toxicities, known as photossensibility, nail changes, alopecia, erythema, urinary, hyperpigmentation, among others. As evidenced in the statements

[...] Photossensibility is what remains [...]. (E12)

[...] The only thing I felt was that the nails were weak and thin hair [...]. (E3)

Redness on the face, swelling dries my face in the early days [...]. (E7)

The photosensitivity is more pronounced in the early days of antineoplastic treatment, and may be accompanied by pain and burning in the eyes when exposed to direct sun light.¹¹ Acute reactions of skin, causes local hypersensitivity, pruritus, pain by exposure of nerve endings, loss of protective barrier of the body with consequent infection, which affects the quality of life of individuals.¹⁵

Side effects of radiation therapy are skin reactions, fatigue and appetite changes. They note, which are expected side effects of radiotherapy, and are associated with the body region where the radiation is applied.¹⁶

Being a visual appearance, hair loss is one of the hard to not be noticed by people living with ill side effects. During the interviews may be noted that many patients with alopecia were nevertheless identified as the only two to immunosuppression side effect, as evidenced in the reports below.

I had hair loss, body hair also, beard. (E12)
[...] It started falling hair and beard. (E5)

Alopecia is not a clinically important event, but for the patient is often considered one of the most devastating side effects of the treatment.⁹ The incidence of occurrence of side effects are modifiable against the different variables, drug, and dose and exposure time. Thus, the different reactions and may be more severe symptomatology in some than in others The attention given, and the guidelines should be individualized to each individual, because each one is unique with special features that need to be considered by the health team to be.

The literature discusses the most frequent reactions of immunosuppressive treatments, as well as ways to solve it, however consider that the experience and the solutions are influenced by culture.¹⁷ Patients Study shows that the individual who experienced the experience of being a carrier cancer has an experience that probably will not be forgotten and will live it necessary to have the

possibility of healing and demonstrate the deponents face illness and treatment actively accepting and facing the clinical condition.¹⁸

Meanwhile coming from diverse side effects of cancer treatment and the disease itself complex, the role of the healthcare team, especially nursing, is complex and needs to be guided by scientific evidence for the arising demands of patients can be met, even in structures and care processes that hinder this individualization because of insufficient resources, both human and material¹⁹.

In this sense, one can say that the professionals working in the Oncology health, to implement a plan of care, need to look at the individual care in a complete way, paying attention to socioeconomic, demographic, cultural, spiritual, and social, beyond biological complaints. With this care offered in a multidisciplinary way, such individuals will feel supported to perform the confrontation that the disease imposes in order to present a range of physical and psychological symptoms related to the natural progression of the disease and the adverse effects of medication.

FINAL CONSIDERATIONS

It is important for the health care team who works with cancer patients constantly be in contact with them, in order to maintain inter-relationship of care between subject and caregiver.

It is noticed that most of the subjects studied, identify side effects of immunosuppressive therapy such as diarrhea, nausea, vomiting, constipation for some, digeusia, asthenia, bleeding, decreased libido, alopecia, paresthesia, proneness to infections, photosensitivity and allergic reactions. Others, even with evidence of symptoms does not recognize as a side effect.

In this sense, the findings are indicating that it is necessary that health professionals involved in the process of implementing an individualized care plan, since the numerous side effects related to cancer treatment are experienced in different way and intensity.

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