148 - NURSING IN CHEMOTHERAPY

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INTRODUCTION

Chemotherapy is the cytotoxic substance use in the treatment of cancer, being one of the treatment modalities that produce cure, control or palliative care.

As Fonseca, et al (2000) the speed with that grows the knowledge of the genetic structure indicates to a way that, in short period, the prevention and the treatment of the cancer will go to cover with absolute predominance. Activating or blocking with great specificity currently called oncogenes, it will be possible to keep under control the harmony of the cellular reproduction. The medicine use that acts directly in this process became a privileged field of studies for the researchers.

Then, Rocha, Marziale and Robazzi (2004) indicate that the groups that work in the preparation and application of chemotherapy need continued improvement.

Bonassa (1998) points the antineoplastic chemotherapy as one of the most important and promising ways to treat the cancer. It's mentioned that the chemotherapy is a systemic treatment where the medicines act indiscriminately in the cells of the patient, be them normal or cancerous, producing quite unpleasant collateral effects and impairment.

Monteiro, et al (1999) affirms that also cares with the professionals who handle with cytostactic agents are necessary, due to the mutagenic potential of the drugs.

Thus, the present study has the objective to describe action of nursing for patients submitted to the chemotherapy treatment. For in such a way, it was opted to the bibliographical research that as Marconi and Lakatos (1999) encloses secondary sources, all public bibliography already become in relation the study subject, since doubtful publications, bulletins, periodicals, magazines, books, research, monographs, thesis, cartographic material, amongst others, even though verbal medias: radio, writings in magnetic ribbon and audiovisuals, films and television. Its purpose is to place the researcher in direct contact with everything what it was written, said or filmed on determined subject, conferences also followed of debates that has been transcribed for some form, wants published or recorded. The present study had begun during the academic experience, through comments made in period of training field and complemented in July to September of 2006.

THEORETICAL RECITAL

It's known that the antineoplastic chemotherapy, using isolated chemical agents or in combination, has for purpose to eliminate tumor cells of the organism.

As Ahana and Kunishi (2002) the chemotherapy is commonly toxic for innumerable normal cells of the organism (marrow bone and mucosa in general) and its indication implies in a series of factors that must be taken in account in its planning, such as: the age of the patient, its nutritional state, the renal, hepatic and pulmonary functions, the presence of infection, the type of tumor, the existence of metastasis and its extension, besides mainly the performance status (life condition), the principal indicator of prognostic of the oncology patient.

According to Marziale (1999) after the analysis of all these variable is that the chemotherapy scheme is chosen more adequate (mono or polichemical), determining the doses, the intervals between the applications and the ways of administration.

The doses, according to the Oncocentro Foundation (1996), are calculated having in account the corporal surface, in turn, based in the weight and the height of the patient.

Ministry of Health (1995) alerts that the chemotherapy treatment is totally contraindicated in terminal patients, in pregnant of the first trimester and in the presence of septicemia and coma. Relatively it is contraindicated for smaller of three months and for very advanced age, those with very accented impairment of the general state, untreatable cerebral metastasis, in the impossibility of the patient to keep in treatment or not to cooperate and the absence of reply of the tumor.

Zanchetta (1998) mentions that the indiscriminate attack by the antineoplastic drugs to fast proliferation cells, normal or cancer cells, produces undesirable collateral or toxic effects, known and extremely feared by the individuals that need to submit it the treatment.

Bonassa (1998) point out that it is basic that, beyond its technician paper related with the manuscript of the drugs, the nurse acts as a multiplier of correct information regarding the chemotherapy treatment, wasting doubts and undoing taboos, fears and preconceptions taken root among the patients and the population in general.

According to Fonseca et al (2000) the antineoplastic agents is classified in accordance with the specificity in cellular cycle and with the chemical structure and the function in cellular level. They inform despite in accordance with the chemical structure, the drugs are divided in: alkyl agents, anti-metabolic, anti-tumor, nitrous urea antibiotics, alkalis of wrinkle and miscellany.

Marziale (1999) mentions that along the years, the pharmaceutical industry, together with the great centers of research, has investigated a great amount of substances with anti-tumor actions - in intention to increase the effectiveness and to diminish the collateral effect - once the used drugs also act in the normal cells and cause damages to the patient submitted to the chemotherapy.

Inside this context, Ahana and Kunishi (2002) tell that the cells of the marrow bone, lymphoblasts, mucous, the skin and sexual gonads are more attacked by the toxic potential of the drugs. The depression of the marrow bone can cause neutropenia and thrombocytopenia, instead of anemia.

The suppression of the proliferation of mucous cells, as the authors above, produces mucositis (aphthoid and gastrointestinal ulceration). The interruption of the proliferation of epithelial cells can cause alopecia and, sometimes, desquamation of the skin. The actions on the seminiferous tubules can produce azoospermia and the actions on the ovaries, amenorrhea.

As the Oncocentro Foundation (1996) the cells of the immunological system proliferate fast e are very susceptible to certain cytotoxic agents and the immunosuppression turns the patient vulnerable to infections.

Monteiro, et al (1999) alerts theoretically that, considering that all the antineoplastic drugs are teratogenic, mutagenic

and carcinogenic for the fact to intervene with the genetic mechanisms and of cellular division. Consequently, the patients treated with these agents can develop another neoplasm.

Another important collateral effect, as Otto (2002) is that the massive cellular destruction causes the release of great amounts of purine bases from the nucleic acid of dead cells, and these purine bases are metabolized in uric acid, that can cause hyperuricemia and, in consequence, renal injury, also being able to occur neurological damage.

The extravasation or the accidental contamination of the skin or the lungs, as Otto (2002) can form great concentrations of drugs in local cells e, thus, to provoke the cellular death for cytotoxic action and to produce sores, bronchitis, among others.

According to Zanchetta (1998) the toxicity for the gastrointestinal treat hinders the oral administration of many drugs. This toxicity includes nauseas, vomits, diarrhea, and cramps, amongst others, that also are acute collateral effect of many antineoplastic drugs managed for endovenous way.

One of the decurrent complications of the use of antineoplastic agents, as Ahana and Kunishi (2002), are edema, necrosis, sores, hemorrhage, inhibition of the synthesis of prostaglandins, secreted normally by the vesical and renal epithelium and that they possess protective action, causing hemorrhagic cystitis.

As Fonseca, et al (2000) the drugs can be managed through the following ways: oral, intramuscular, subcutaneous, endovenous, intra-arterial, intrathecal, intraperitoneal, intrapleural, intravesical, topic and intrarectal application. For this study it is focused endovenous way that is more commonly used.

Ministry of Health (1995) mentions that the endovenous administration is the most common way of administration of antineoplastic drugs. In relation to the oral, intramuscular and subcutaneous ways, the endovenous application is safer as the serum level of the drug and its absorption. However, it requires special cares, mainly when vesicant chemotherapy drugs are managed that are capable to cause intense inflammation and tissue necrosis when infiltrated outside of the sanguine vase.

Moreover, as the Oncocentro Foundation (1996) the lingering catheter of the oncology treatments, the vascular and cutaneous fragility, common in this group of patients, the frequent thrombocytopenia and the gradual consuming of the decurrent peripheral venous net of the proper chemotherapy, demand rigorous knowledge and ability of the professional who applies these drugs.

Ahana and Kunishi (2002) cite despite the constant use of the venous net for the application of chemotherapy, sores, antibiotics, blood and its derivatives and for the destined collection the accomplishment of laboratorial examinations take the more serious problems each time of visualization and punch of vases. Associates to this, the hair fragility, the decurrent malnutrition and the venous sclerosis of the proper illness or the treatment aggravate the problem of vascular access. On the other hand, we have patients with good peripheral venous net, however with forecast of drawn out chemotherapy treatment. In all these cases are indicated the venous catheters, that can be of shortness or long permanence.

In order to minimize the complications or collateral effect of the antineoplastic treatment, Otto (2002) considers some measures as:

To keep the integrity of the skin and annexes: to evaluate the skin and annexes daily, as well as the place used for infusion; to guide the patient how much to prevent direct solar exposition, especially in the period enters the 10 14 hours, always making use of solar protector, with factor 15 or more, in areas displayed to the sun; to guide the use of light clothes with long sleeves to re-cover arms and the use of handkerchiefs or hat; to instruct the patient for neutral soap use and so that it takes bath with lukewarm water; to guide not to use abrasive solutions for cleanness of skin or in the bath; to instruct so that if it does not display the temperature extremities (cold or extreme heat);

With regard to the cares to be adopted in the alopecia, the Oncocentro Foundation (1996) detaches: to guide the patient on the occurrence of the alopecia in medications most specific; to encourage the patient to choose wigs, turbans, hats, before the complete fall of the hair; to guide how much to the daily cares of the scalp to minimize the loss of heat for this region; to be intent the alterations in the epidermis of the scalp;

The extravasation of vesicant drugs can result in significant morbidity and serious limitation of the quality of life of the oncology patient, to prevent the extravasation; in such a way, Fonseca, et al (2000) comment: not to manage vesicant drugs in drawn out continuous infusion (more than one hour) through peripheral vein punched with scalp; in this in case that it has necessity of the use of catheter of long permanence; to prevent the use of punched veins has less 24-hour, exactly that they present good venous return; to choose the vein that offers the best protection to the joints, tendons and nerves, that the lesser anatomical and functional damage causes and that it offers better surgical conditions, in case that extravasation occurs; to certify of the correct positioning of scalp before managing the chemotherapy.

To prevent the hematological toxicity, as leucopenia and thrombocytopenia, Ahana and Kunishi (20002) tell that the following actions if make necessary: to control with precision the signals and symptoms of infection: counting of white globules, temperature, alteration of habitual the respiratory standard, integrity of the skin and mucosa, alteration in the color, I smell and in the urinária frequency; to evaluate the standards of living with regard to the hygiene; to correct practical, if the necessary one; to identify and to eliminate the ambient risks of infection; to guide on the necessity of daily treatment of verbal, nasal, anal and genitourinary the sockets; to control the counting of platelets and the coagulation profile with precision; to instruct the patient how much to the precautions against hemorrhage.

For the gastrointestinal toxicity (anorexia, nausea, vomit, mucositis, obstipação, diarrhea), Fonseca, et al (2000) send regards the following actions: to routinely manage antiemetic medication and before the chemotherapy; to guide the patient on the practical staffs who diminish nauseas and vomits as: not to be in fast, to prevent hot, greasy and seasoned foods, to eat in lesser amounts and more frequent intervals; to modify the ambient factors that contribute for nauseas and vomits: to keep calm, free place of awkward odors and comfortable room; to guide the prophylactic use of mouths washing and gargle with alkaline solutions, making the dental brushing with soft brush and soft dental cream; to keep the lubricated lips solutions or creams the base of petroleum jelly or cacao; to guide alimentary ingesta it, exactly during the inappetence picture; to stimulate the ingesta of rich foods in proteins and calories; to guide the patient to include obstipating foods in the diet;

The related neurological complications with the treatment chemotherapy can include sensorial perception modified (visual, auditory, aesthetic, gustative, tactile, and olfactory). Ahana and Kunishi (2002) recommend: guide the patient and familiar to be intent how much to the signal and symptom of the neurotoxicity for prevention of accident; to institute measures of security for the patients interned with mental alterations (gratings in the stream bed, constant familiar accompaniment).

Segundo Fonseca, et al (2000) for the prevention of the vesical and renal toxicity is the hyper hydration, therefore of this form if it promotes urinary a flow high, capable to dilute the chemotherapy, becoming them less toxic for the renal tubules.

FINAL CONSIDERATIONS

The used antineoplastic in the chemotherapy treatment of the oncology patient acts in systemic form, producing some

reactions and/or complications adverse.

The knowledge of these if makes necessary so that if they can have subsidies to give assistance of adequate nursing to these patients, aiming at the improvement in the quality of life, many times preventing possible decurrent complications of the treatment.

During the academic experience, one perceived that taking care of these patients' improvement or promotion of the quality of life of the person is directed for. Thus being, she is necessary to search the necessities with priority, considering the individuality and the style of life, the beliefs and cultural values of each customer.

This form to attend, considering holistically the customer, comes being a goal of the nursing, in a daily challenge where important questions emerge: as to make it, as we are prepared by the university formation to make it and if the context where practical ours it is exerted allows in fact to a more including intervention and humanist.

In practical the daily one, one perceived that this boarding can be reached, since the professional nurses are searching the formation beyond its graduations.

Thus being, the education in nursing estimates the development of a process of changes in the knowledge, the normatização of practical and its constant reevaluation through nursing research, in the ability of communication with the customer of cancer and its familiar ones. This education also assumes that the oncology nursing exerts a function of orientation and education of the customer and its family, in the prevention of the cancer, its precocious detention, whitewashing and cares with the customer.

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NURSING IN CHEMOTHERAPY

ABSTRACT: Chemotherapy is the cytotoxic substance use in of the cancer. The teams that work in the preparation and applications of chemotherapy drugs need continued improvement. The present study it has for objective to describe action of nursing for patients submitted to the chemotherapy treatment. For in such a way, it was opted to the Bibliographical Research. The chemotherapy is commonly toxic for innumerable normal cells of the organism (marrow bone and mucosa in general) and its indication implies in a series of factors that must be taken in account in its planning, such as: the age of the patient, its nutritional state, and pulmonary, renal, hepatic function, the presence of infection, the type of tumor, the existence of metastasis and its extension. It is basic that, beyond its paper technician related with the manuscript of the drugs, the nurse acts as a multiplier of information correct regarding the chemotherapy treatment, wasting doubts and undoing taboos. The knowledge of the reactions and complications during the chemotherapy treatment if makes necessary so that if the can have subsidies to give assistance of adequate nursing to these patients, aiming at to the improvement in the quality of life, many times preventing possible decurrent complications of the treatment.

KEY WORDS: chemotherapy; cytotoxic drugs; collateral effect**.**

NOURRIR EN CHIMIOTHÉRAPIE

LE RÉSUMÉ: La chimiothérapie est l'usage de la substance du cytotoxic dans du cancer. Les équipes qui travaillent dans la préparation et candidatures de drogues de la chimiothérapie ont besoin d'amélioration continuée. La présente étude qu'il a pour objectif pour décrire action de nourrir pour les malades soumis au traitement de la chimiothérapie. Pour dans un tel chemin, il a été opté à la Recherche Bibliographique. La chimiothérapie est toxique pour cellules normales innombrables de l'organisme communément (os de la moelle et mucosa dans général) et son indication implique dans une série de facteurs qui doivent être amenés dans compte dans son organisation, tel que: l'âge du malade, son état alimentaire, et fonction pulmonaire, rénale, hépatique, la présence d'infection, le type de tumeur, l'existence de métastase et son extension. C'est de base que, au-delà son technicien en papier raconté avec le manuscrit des drogues, l'infirmière agit comme un multiplicateur de renseignements correct concernant le traitement de la chimiothérapie, gaspiller des doutes et annuler des tabous. La connaissance des réactions et complications pendant le traitement de la chimiothérapie si fait nécessaire afin que si la boîte a des primes pour donner assistance de nourrir adéquat à ces malades, pendant que viser à à l'amélioration dans la qualité de vie, beaucoup de fois qui préviennent des complications du decurrent possibles du traitement.

LES MOTS DE LA CLEF: la chimiothérapie; le cytotoxic droguez; l'effet collatéral.

CUIDADO EN QUIMIOTERAPIA

EL LO ABSTRACTO: La quimioterapia es el uso de substancia de cytotoxic en del cáncer. Los equipos que trabajan en la preparación y aplicaciones de drogas de la quimioterapia necesitan la mejora continuada. El estudio presente que tiene para el objetivo para describir la acción de alimentar para los pacientes sometida al tratamiento de la quimioterapia. Para de semejante manera, se optó a la Investigación Bibliográfica. La quimioterapia es normalmente el tóxico para las células normales innumerables del organismo (el hueso de la médula y mucosa en general) y su indicación implica en una serie de factores que deben tomarse en la cuenta en su planificación, como: la edad del paciente, su estado nutritivo, y la función pulmonar, renal, hepática, la presencia de infección, el tipo de tumor, la existencia de metástasis y su extensión. Es básico que, más allá de su técnico del papel relacionado con el manuscrito de las drogas, la enfermera actúa como un multiplicador de información correcto con respecto al tratamiento de la quimioterapia, gastando las dudas y deshaciendo los tabús. El conocimiento de las reacciones y complicaciones durante el tratamiento de la quimioterapia si hace necesario para que si la lata tiene los subsidios para dar ayuda de alimentar adecuado a estos pacientes, mientras apuntando a a la mejora en la calidad de vida, muchas veces previniendo posibles complicaciones del decurrent del tratamiento.

LAS PALABRAS DE LA LLAVE: la quimioterapia; narcotice el cytotoxic; el efecto colateral.

ENFERMAGEM EM QUIMIOTERAPIA

RESUMO: Quimioterapia é o uso de substâncias citotóxicas no tratamento do câncer. As equipes que trabalham no preparo e aplicações de quimioterápicos necessitam de aprimoramento continuado. O presente estudo tem por objetivo descrever ações de enfermagem para pacientes submetidos ao tratamento quimioterápico. Para tanto, optou-se pela Pesquisa Bibliográfica. A quimioterapia é comumente tóxica para inúmeras células normais do organismo (as da medula óssea e das mucosas em geral) e sua indicação implica em uma série de fatores que devem ser levados em conta no seu planejamento, tais como: a idade do paciente, seu estado nutricional, a função renal, hepática e pulmonar, a presença de infecção, o tipo de tumor, a existência de metástase e sua extensão. É fundamental que, além do seu papel técnico relacionado com o manuseio das drogas, o enfermeiro atue como um multiplicador de informações correta a respeito do tratamento quimioterápico, dissipando dúvidas e desfazendo tabus. O conhecimento das reações e/ou complicações durante o tratamento quimioterápico se faz necessário para que se possam ter subsídios para prestar assistência de enfermagem adequada a estes pacientes, visando à melhoria na qualidade de vida, muitas vezes prevenindo possíveis complicações decorrentes do tratamento.

PALAVRAS-CHAVE: quimioterapia, drogas citotóxicas, efeitos colaterais.