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# NURSING PROBLEMS IN A PATIENT WITH CANCER OF THE CERVICAL SPINAL CORD

Problemy pielęgnacyjne u pacjenta z nowotworem szyjnego odcinka rdzenia kręgowego

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#### Key words: nursing problems, cancer of the cervical spinal cord.

#### Summary

Neoplastic lesions of the cervical spinal cord, are much less frequently than intracranial tumors.

Aim of this study was to present the most important nursing problems, which can meet with the nurse taking care of the quadriplegic patient with paralysis. Presented case study patient treated surgically for tumors of the cervical spinal cord.

Patient care discussed completely immobilized, only passing a care nursing staff. In the process of care should pay particular attention to: the prevention of cardiovascular and respiratory disorders, prevention of decubitus changes, preventing inflammation of the bladder and prevent pulmonary embolism.

It is very important to include early physical rehabilitation and psychological care of patients and their families.

#### Słowa kluczowe: problemy pielęgnacyjne, nowotwór szyjnego odcinka rdzenia kręgowego.

#### Streszczenie

Zmiany nowotworowe rdzenia kręgowego odcinka szyjnego, występują znacznie rzadziej niż guzy wewnątrzczaszkowe.

Celem pracy, było przedstawienie najważniejszych problemów pielęgnacyjnych, z jakimi może spotkać się pielęgniarka opiekująca się pacjentem z porażeniem czterokończynowym. Przedstawiono studium indywidualnego przypadku pacjenta leczonego operacyjnie z powodu guza rdzenia kręgowego odcinka szyjnego.

Omówiono pielęgnację pacjenta całkowicie unieruchomionego, zdanego wyłącznie na opiekę personelu pielęgniarskiego. W procesie pielęgnowania należy zwrócić szczególną uwagę na: zapobieganie zaburzeniom krążenia i oddychania, zapobieganie zmianom odleżynowym, zapobieganie stanom zapalnym pęcherza moczowego i zapobieganie zatorowości płucnej.

Bardzo istotne jest włączenie wczesnej rehabilitacji ruchowej i opieki psychologicznej nad chorym i jego rodziną.

#### Introduction

Every second of the human body are created specific atypical cells, leading to cancerous changes. Each of us has in addition to hundreds of billions of normal cells and hundreds of thousands of cancer cells. There are theories, not recognized by the official oncology that cancer cells are derived from mold whether they are fungal cells. Everyone is exposed to tumor formation. Properly functioning immune system is able to remove degenerate cells at the time to identify them. Cancer develops when the immune system is blocked. Most commonly happens as a result of a shock, the tragedy of life, spiritual burden, stress, alcohol, drugs, hate, burdensome loneliness, sadness, bitterness, or also from many other causes of hypoxia, body type, long-term inflammatory foci in the teeth, for example, or bays, as well as ionizing radiation or geopathic (watercourses) [1, 4, 8, 11, 14, 15, 19, 22, 23, 30, 31].

Changing cancer is the most dangerous time, when spreads throughout the body. It is the cause of most cancer deaths. The number of deaths from cancer is increasing dramatically, in many cases, doctors are powerless. Malignant disease involving not only the development of pathological tissue, but it is a disease of the body. Malignant tumors are among the deadliest group of diseases that affect humanity, and the number of illnesses and deaths is growing. It grows as a result of civilization changes that increase the likelihood of illness, also due to a general lengthening of the average age of life. "From the perspective of the patient's word cancer arouses horror. In the view of preventing the onset of many people actually can not, and if you are already ill, no rescue -diagnosis of cancer (generally wrongly often associated with cancer) is tantamount to a death sentence. Patients often avoid testing may detect a change in cancer. When the disease is in the initial phase will, do not know. Often use different, and wonderful, unconventional methods of therapy, often deadly. There are patients who do not cooperate with the doctor, recognizing that nothing will help you through the method of treatment. But it is also true that there is no effective prophylaxis antitumor that the progress of science and medicine in the treatment of cancer are enormous, many cancers, especially diagnosed early enough, you can just heal, and in many other cases, you can at least significantly prolong survival and reduce suffering of the patient. Change of spinal canal tumors are less common than brain tumors. In the adult population the ratio is 1:5, much less common tumors are found in a group of child-1 :10-1: 20 Somewhat differently also shows the incidence of tumors in- the. In children, the ratio of tumor inside to the outside of spinal meningitis is significantly higher, and they are 30-35% change, while in adults 15-20%. The paper presents case study problems which could meet a nurse, taking care of the

patient with cancer of the cervical spinal cord after surgery [4, 8, 9, 11, 14, 15, 19, 22, 24, 31].

Spinal cord (medulla spinalis) - is the biggest addition to the brain structure of the nervous system. Has a cylindrical shape of an elongated, flattened from front to back, and bent according to the curves of the spine. It is a direct extension of the medulla oblongata. From the top starts at the level of foramen of the skull (an extension of the brain stem) and runs down around the spinal canal. On the outside is surrounded by a connective membrane, called the tires, and cerebrospinal fluid, and between the tires and the wall of the spinal canal is slender and adipose tissue with venous plexuses. They protect the core from oppression by the movements of the spine. Core thickness is uneven. Thickening occurs in the cervical and lumbar and among them there is a long, narrow section of the breast. The bulge in the lumbar spine ends cored from the bottom cone, which turns into a thin thread of a final. The spinal cord has two curves: upper, cervical curvature, which is directed forward and convex curvature of the lower thoracic spine, convex to the rear. The front core is longitudinally deep anterior median fissure, from behind the posterior median furrow is shallower, which connects to the posterior median septum [3, 4, 5, 7, 17, 20].

By the concept, a tumor of the spinal cord "in the strict sense is defined anatomy pathological these tumors, which originate from the spinal cord. Often, to determine, a tumor of the spine and spinal cord tumor is used interchangeably. The division of tumors based on the histological structure and their location. When determining the location takes into consideration the location of the spine. Most spinal cord, extradural location, inside the tire, or among core, as well as its reference for levels of the spine. Most spinal tumors are located in the thoracic spine, the rest evenly in the lumbar and cervical. From the anatomical point of view, there is a definite correlation between the number of vertebrae in the spine and the relevant sections of the incidence of these tumors. A barrier between the spinal cord and the spinal cord [8, 14, 19, 27].

The predominant symptom is pain, which locates at the level of change. Appear abnormal sensation, or paresis (every 3 patient). Is a common symptom of the distal limb paresthesias, hypoesthesia rarely occurs. Dominated by spasticity in motor neuron damage. This leads to muscle atrophy and the abolition of tendon reflexes (damage to the spinal anterior horn). There may be a reflex torticollis and scoliosis. Neurological syndrome depends on the location of the tumor. Sphincter control, especially in localized changes in the lumbar spine tends to be impaired in the early stages of the disease. In cases of high cervical cancer may be to address the cranial nerves, especially the lower group. There is a time dysphagia, dysarthria, and tongue fasciculations. You may experience hydrocephalus (1-12,5 %) in patients with tumors within the core. The tumor can spread the cell to the inside of the cranial subarachnoid space. As the tumor grows there may be paresis and paralysis. Clinical symptoms are associated with the presence of slowly growing mass of oppressing the roots, spinal cord and cortico-spinal path. Usually develop slowly, sometimes disappear for a while. Cancer is diagnosed on average 2 years after disease onset. Dysfunction of the sphincter of the rectum and bladder are rarely the first symptom of spinal tumor. These symptoms result from compression of the dura mater, nerve roots and spinal cord itself. Then there are limitations to the blood supply to the core. The result is the emergence of different and serious neurological disorders. Spinal cord tolerates the mass of the tumor, it is worse to the interruption of blood supply to the tissue core. In a short time, it leads to irreversible damage, which are a consequence of spinal cord infarction. Symptoms of spinal tumors are often uncharacteristic. This delays to determine the proper diagnosis. It has a huge impact on the deterioration of prognosis. This also applies to cases in which we deal with benign tumors. Tumors inside the core reveal a secret, the disease is slow, an average of 2-3 years at diagnosis. In the case of histologically malignant tumors, it can be much shorter (less than 10 months). Common are cases of early surge, mostly associated with the occurrence of bleeding into the tumor. This happens especially in ependymoma. Metastatic tumors have unique clinical picture. First, there are aches and pains that often precede other symptoms by several months. There is constant pain, exacerbated in the supine position, often at night. Then there are cut paresis and sensory disturbances. This leads to disturbances of sphincter until urinary retention. Natural history is characterized by relentless progression of the disease, leading to irreversible paralysis, but the pace of accumulation of changes is difficult to predict. Cases with pathological fractures may manifest a sudden onset of paraplegia [1, 4, 8, 9, 11, 12, 15, 18, 19, 21, 27]. Methodology [16, 25]:

In this paper, the analysis of a single case, giving a description of the disease process, diagnosis, treatment and care, the problems and ways of solving them.

Aim

To present the problems of surgical care in a patient with cancer of the cervical spinal cord and to provide means for their implementation, to determine the work (research) and the formulation of problems requires, realizing what we take and what tests may be useful for them, the results obtained in [25]. Material-item test

The research used the medical records, which refers to the surgical patient's medical history. The research work done in this case of a patient operated on due to tumor of the cervical spinal cord.

Research problem, detailed problems.

The research problem-to some question or a set of questions to which answers have to provide a study [16]. The research problem is the scope of nursing care exercised over the patient with a tumor of the cervical spinal cord surgically treated.

Specific Problems:

1. What problems occur nurse - patient care after surgery?

2. Which of the problems is the patient most (especially) the onerous?

3. How to plan the nursing care of the patient?

4. What action should the nurse taking care of the patient in order to solve existing problems?

5. How to prepare a patient's family to care for the patient at home?

The methods, techniques and tools of measurement [6, 16, 25]:

In nursing, the use of different research techniques, the main method is the case.

The method is a way for individual research, which involves analyzing the individual lives of people, to develop diagnostics for therapeutic action [16].

The case study is used to collect various kinds of information about the case, especially about the family situation, environmental, social, material and living conditions, physical, psychological test persons [16].

In this work, using the method of individual case, that analysis of one patient. This method assigned to observation and interview techniques of nursing and medical documents were analyzed, which were operated on the patient's tumor of the cervical spinal cord.

Technology - is a set of specific practical actions that involve the collection and production of material needed to study and put forward on the basis of generalizations and applications [16].

Observation care is the most valuable and often used technique for research. Is a constant element of the nursing process.

Measurement tool is an aid that is used to collect empirical materials that are useful in solving the problem of research undertaken [6].

Measurement tools that were used include the history of the disease and treated card, feverish, individual card orders medical, nursing care card, the card post-operative intensive care, quality assessment of pressure ulcers, preoperative anesthetic survey.

### The results

Care of patients with cancer of the cervical spinal cord - case study.

XY patient, a man 59 years admitted to the neurosurgical emergency because of severe pain in the neck and the weakening of the arms and legs. Seven days prior to hospitalization occurred limb weakness, urinary incontinence, stool occasionally. On admission the physical examination revealed a sick fairly good condition, slight dyspnea at rest, increased by exertion, lack of auscultatory changes in the lungs. Cardiac function measuring flask - 64/minutę without additional murmurs. Blood pressure was 110/65 mm Hg. In the interview, it was also gathered varicose veins, for 2 years taking medications p / thrombophlebitis (acenocumarol). Patient economically active, smoke cigarettes, about 30 pieces a day, does not use any supplements.

Diagnosis - MRI diagnosed with a tumor of the cervical spinal cord (probably astrocytoma).

Blood samples were taken for tests: blood cell count, ESR, ionogram, glucose, creatinine, gas analysis, APTT, INR, HBS, determined the blood group. Booked 3 units packed red blood cells. The patient performed a chest X-ray. ECG was performed. Prepared operative field-shaved skin on the neck.

Results of laboratory tests;

blood group A RH (minus); ESR 80 mm / h; Blood tests: RDW-CV: 13.8% g / dL, HGB: 11.1% g / dL, MCH V, 27.3% pg; PDW: 12.1% fL, P-LCR: 23.1 %, HCT, 35.2%; MPV: 10.1% fL, PLT, 211 k / uL; PCT: 0.21%, WBC, 8.91 k / uL, RBC, 4.21 million / uL; MCHC : 30.1% g / dL, RDW-SD: 41.1 fL, MCV: 80.1 fL; INR: 1.09; Creatinine: 1.11 mg / dL; Electrolytes: sodium 135mmol / L, potassium 3.9 mmol / l, chloride 111mmol / l; Glucose: 98 mg/dl; Gas analysis: pH 7,487-7,435-7,434, pCO 23,4-28,3-34,4 mm Hg, pO 54,5-65, -69.1 mm Hg; cHCO 17,3-18,6-22,5 mmol / L, BE-3.9, -4.1, 1.0 mmol / l, SO 90,3-93,1%; HBS-negative. ECG: sinus rhythm, 75/min. Normogram. Shallow, negative T in V1-V3. Chest X-ray: pleural cavity free, with no perceptible lung densities and congestive changes. Left ventricular heart. Pulmonary wider bays, vascular.

Patients concerned about your health, depressed. Has been informed of the proceedings after surgery, you need to place in the hall of intensive supervision and continuous monitoring of general condition. Anesthetic consultation was held, the patient was qualified for the surgery. The patient agreed to perform surgery - a treatment laminectomia. Given commissioned premedication. Then the patient was transported along with the documentation on the operating suite. After surgery the patient was placed in the recovery room. At the time of the adoption of efficient in cardiopulmonary, with the assumed tube intubation for breathing their own with little deposition in the airways. Mucosing out patient, if necessary, previously prepared a mammal, was founded on the tube and filter connected to the oxygen flow of 4 liters / min. The patient was connected to cardiomonitor to monitor the basic parameters - blood pressure, heart rate, oxygen saturation, heart rate, breathing. The patient admitted to the bloc founded on inserting central to the supply of medicines ordered. In Redon wound drainage found no suction drainage was observed quantity of content and condition of the dressing in terms of leakage (drain was removed on the 3rd day after surgery). Neurological examination revealed quadriplegia paralysis.

The patient had a Foley catheter on a permanent basis, conducted fluid balance, postoperative follow-founded the card of the patient. Patient requires frequent changes in postural position, therefore the patient was put on antibedsore mattress, pressure variability. In the first day after surgery patient breathing without efficient in retention, Sa 02-98 mg%, at the request of the doctor removed the tube intubation. In the second postoperative day was observed in the patient's depressed mood, a reluctance to talk, crying.

Problems of nursing and patient care process after surgery to remove a tumor of the cervical spinal cord.

Appropriate treatment and nursing of patients with quadriplegic paralysis is possible in the hospitals in

neurosurgical wards. The nurse taking care of the patient after surgery to remove a tumor of the spinal cord is quite a difficult role to play. Professional nursing care - to prepare for surgery, postoperative surveillance, diagnosis of care problems and their implementation are of a very large impact on patient outcome. The main objective of nursing is to protect the biological needs of the patient, preventing complications of immobility, to reduce the risk of death for complicity in the intensive care patient, as well as easing symptoms of psychological stress caused by disease and treatment [1, 2, 6, 10, 12, 13, 18, 21, 24, 26, 27].

Tumors of the spinal cord leads to changes within the nervous system, manifested by neurological syndromes that impair the efficiency of the patient often entirely, and are often the cause of his death. The nurse must be carefully monitored for worsening of the patient's general and neurological status. Especially in the postoperative period, before the patient will not remain without effect of anesthetic drugs and his condition is not stable, it must be subjected to rigorous control and care in the intensive care room conditions.

Professional care of the patient after surgery of spinal cord tumor in 0'postoperative day consists of: observation of the patient's state of consciousness; monitoring of vital functions: blood pressure, pulse, heart rate, breathing, temperature; assessing the color of the skin and mucous membranes; control of postoperative wound - dressing, drainage (quantity and quality of content); control fluid balance, urine output (Foley catheter); struggle with the pain - the supply of medications, patient observation after drug administration; ensuring patient comfort; documentation of all measurements of the patient in the safety observer; documented in medication infused liquids; for immediate notification of the distressing symptoms to your doctor. Neurosurgical nurse must also remember the good positioning of the patient after surgery. Each patient's position depends on the type of the surgery, the general condition of the patient and doctor. After surgery on the cervical spine the patient is always secured in the collar of orthopedic and is flat (no pillow) to the head and torso were in one axis [1, 2, 6, 12, 18, 21, 24, 26, 27].

Hypokinesy interferes with the function of the following systems: cardiovascular, respiratory, neuromuscular, skeletal and water and electrolyte balance, especially calcium, and affects the blood clotting process. Prolonged stay in bed and lack of physical activity to reduce the overall body metabolism, leading to a worsening of the functional principle of all systems in the body, leading to clinical manifestations of the so-called immobilization syndrome [29]. The purpose of the care of patients with tetraplegia is to detect early signs of complications, metabolic stability, balance the body and maintain basic life functions: circulatory and respiratory equipment in case of disruption of these systems. Direct home care for people with tetraplegia is very broad, since the level of autonomy of these patients is very low, or non-existent. Autonomy depends on the level of spinal injury, which determines the shock. The higher the level of infestation, the greater the dependence of the patient [2].

Nursing staff should bear in mind that the process of nursing a patient with quadriplegia must take into account the problems arising in all spheres of life, not just in the physical realm. Specificity of work with the patient therefore requires a neurosurgical nurse specific personality traits, ability to make contact in a therapeutic atmosphere of trust and for each individual patient nursing care. The patient must be handled gently, but firmly, speak warmly, encouraging him with my presence, willingness to help and dedicated action [1, 2, 6, 8, 12, 13, 18, 21, 24, 26, 27].

It is very important in patient care is also a sphere of mental, spiritual, as well as taking care of sick family. The implementation of care specified areas is largely in the provision of support. The patient is experiencing stress at any stage of treatment and care. With a stay in hospital is almost always associated with a view to recuperating beyond the thought of their own death or the encounter with the death of others. This anxiety is caused by its own disturbing suffering, lack of confidence in the hospital as a result of the prevailing opinion or personal experience. Takes into account the detection of an incurable and deadly disease, a mistake in diagnosis, treatment failures, complications, the possibility of infection, the lack of care [1, 2, 12, 18, 27].

The disease can cause emotional disturbances in the patient. Depression may be a response to the patient's perception of pain, helplessness, loss of desire to live in relation to neurological deficit. Each patient perceives his own suffering, sickness, pain and awareness of impending death. The task of nurses is to care for the comfort of physical, mental and spiritual dying man. Care should include a deep respect, acceptance and humility in the dying person and her family. The patient's family needs the necessary support to enable it to cope with the progression of the disease, minimizing the stress and consolidating the strength to be able to effectively support the patient. The patient's family is horrified by the situation, he knows nothing about the care of a disabled person. The whole situation is worsened by the fact that seen in patients with depression, hopelessness. Making educational activities by nurses to the patient's family prepares it for patient care in the home. Proper co-operation of staff with patients and their families in identifying needs of the patient, their satisfying, problem solving, as well as provide educational activities to provide patients with professional and safe care. Deteriorating general condition of the patient requires a nurse to take a number of medical and nursing activities, as well as learn some of the patient's family activities such as watering, feeding, changing ways of dressing, toilet body in bed. Implementation of these activities in an appropriate manner, allows for improved quality of life of the patient. Allows the patient and his family survive in relative well-being to the end of life [1, 2, 10, 15, 21-23, 27].

In the process of nurturing a nurse take individualized nursing care. Consciously uses assessment of the biopsycho-social patient and take action goals, plans would help to improve or maintain the current condition of the patient. Nursing process as the scientific method provide nursing assistance, is the essence of nursing practice [24].

Stages of the nursing process: I - nursing diagnosis (identifying the health needs of the patient), II - the planning of patient care and the environment, III - to implement the care plan, IV - evaluating the results. Based on

analysis of collected data and information contained in the research tool were raised in relation to the patient treated surgically for tumors of the cervical spinal cord following care problems [1, 2, 6, 8, 10, 12, 13, 18, 21, 22, 24, 26-32]: PROBLEM 1.

The risk of life-threatening disturbances of the cardiovascular system. Objective - to prevent an intensification of symptoms from the circulatory system. Implementation of care: parameter monitoring - blood pressure, heart rate, body temperature, breathing (eg, the occurrence of dyspnea), observation of skin color (eg, the occurrence of cyanosis), observation of the patient's state of consciousness; documented in the patient observation; performance of the ECG; assumption injection into a vein; catheter to monitor urine output, maintaining fluid balance; administration of oxygen under the control of blood gases; download commissioned laboratory tests; commissioned the preparation of cardiovascular drugs, anti-edema, transfusion of infusion solutions; central venous pressure monitoring. Evaluation of nursing. Proper post-operative care, patient observation, conducted drug prevents the occurrence of complications of the cardiovascular system.

#### PROBLEM 2.

Retention of secretions in the airway and hampering breathing patient risk of respiratory failure caused by respiratory muscle weakness, threatening deterioration of the patient. Objective - to prevent an intensification of symptoms of respiratory failure, preventing respiratory infections u. Implementation of care: observation of the patient in the direction of eg the resting dyspnea, cyanosis peripheral-monitoring of breath (rhythm, frequency, character); monitoring vital signs-blood pressure, heart rate; the use of pulse oximetry (transcutaneous hemoglobin oxygen saturation monitoring); maintaining a patent airway, secretions out the mucus secretions deposited in the airways if necessary; use of disposable suction tubing, adherence to aseptic technique; administration of oxygen under the control of blood gases - an ad hoc basis by mask 5-6 L / minute by nasal catheter or 2-4 L / minute; administration of bronchodilators (aminophylline), to facilitate the removal of retained secretions such mucolitics (N-acetylcysteine); use of inhaled, air humidifiers; use of postural position with a slightly raised body, sitting or rest half seated effect of reducing pressure on the abdominal organs and facilitate j. Breathing; keeping with the breathing exercise tubing with a bottle-blowing; back rubbing alcohol and glycerine, patting the chest; maintain an adequate microclimate in the room air humidity (50-70%), the appropriate temperature (20-21 degrees), airing the room; eliminating fear and anxiety by creating an atmosphere of trust and patient safety. Evaluation of nursing. Careful observation and management of care helps the patient to breathe, does not allow for the occurrence of severe respiratory distress. PROBLEM 3.

The risk of skin changes caused by immobilization of pressure ulcers as a result of shock. Objective - to prevent complications that arise from dysfunction of the nervous system and paralysis. Implementation of care: aily assessment of the risk of pressure sores such as the Norton scale; elimination of oppression of the places with the emergence of pressure sores, the patient explanation of the need to change position every 2 hours or more; use of the variable pressure mattress, anti bedsores, facilities-rollers, pulleys under the heel, sheep wool bed liner; Daily toilet body of the patient, depending on the dirt and perspiration, paying attention to: cleaning of the skin surrounding the perineum-particularly important in pollution; use gentle soap not drying skin at pH 5.5, the water temperature to 30 ° C; careful drying of the skin, combined with a gentle moisturizing massage with the use of such oils, lubricating the skin or propolis ointment sudocrem [13]. frequent change of underwear and bed linen, which should be made of fabric breathable, moisture-absorbent, paying attention to: checking whether the patient is not on creases, buttons, linens properly stretched, not starched; contraindicated the use of rubber underlay; applying diapers-pants to choose the right size, which helps prevent chafing; the positioning of the patient, eg on the side of the lower limbs separated by pillows in order to avoid mutual oppression; in case of skin erythema Bioclusiv dressing applied; a diet high-calorie, high protein, vitamins (vitamin A, C), iron and zinc; encouraging patient and family education to learn nursing, proper change of position; patting dry (without antiseptics may damage skin); Do not use both of greasing and powders. Evaluation of nursing. Properly carried out a change of position in bed and care of the patient reduces the risk of bedsores.

### PROBLEM 4.

The risk of thromboembolic disease due to the long immobilization. Objective - prevention of thromboembolism. Implementation of care: possible early start (depending on the state of circulatory and respiratory); passive-gym exercises the lower extremities to improve circulation, massage towards the heart eg brush; overs avoiding the knee such as shafts, hindering the outflow of venous blood-alignment of the lower limbs above (20 degrees above the body); frequent change of position of the patient's body; Adequate hydration of the patient; drug use p / thrombotic events (eg, Lovenox); Periodic monitoring of laboratory tests-blood platelets, INR, APTT, thrombin time, fibrinogen; observation of the occurrence of inflammation (eg redness, pain, limb swelling uneven, cyanosis foot and calf leather, temperature) - the execution of cold compresses Altacet eg, after resolution of symptoms the patient should be carefully run, the assumption of compression stockings, tie on a limb; the use of measuring the circumference of the extremities (above the ankle, the fibula head level, mid-thigh); the inclusion of the family of the patient for rehabilitation exercises-cooperation with the physiotherapist. Evaluation of nursing. Through the proper rehabilitation and care there was no evidence of thromboembolic complications.

### PROBLEM 5.

The risk of contracture, muscle atrophy due to impairment of the patient. Objective - prevention of complications of impaired mobility of the patient. implementation of care: One application of such a bed Egerton;

change of body position with a focus on correct posture [26]: the arrangement of the back-neutral position, feeding of a small pillow under his head; slight elevation of the upper limbs on the pads (protects against damage to the ulnar nerve), the degree of flexion above 90 degrees, to straighten the arm at the wrist, the fingers slightly bent and the thumb in opposition to other fingers, a hand placing a small ball; legs-straight in a neutral position, feeding of a small roll under your knees and hips, feet protection against external rotation (palm arranged so that the angle between her and the calf was 90 degrees and protect against the ptosis; the arrangement on the side - upper limb slightly bent at the elbow, placed at the head, palm open and fingers straight, back straight, planted bag or roller - lower limb - on the extension of the spine, planted the foot roller, foot positioned at a right angle, the second limb - put an bent hip and knee, laid on the pillows; physical exercises with the physiotherapist-use of passive exercise, paying attention to retaining the full range of motion in the joints of the arms and legs; implementation of the family to exercise, learn proper guardians change of position and positioning the patient in bed; Warm baths can be used in bed; supporting pharmacological agents p / spastic (eg Baclofen), others - paracetamol, ibuprofen. Evaluation of nursing. The nurse and rehabilitation carried out to reduce the effects of immobility caused by patient self-paralysis and inability to change positions.

The risk of urinary tract infections because of the need to maintain long-term Foley catheter. Objective - to prevent urinary tract infection, ensuring patency of the catheter. Implementation of care: Daily exact Toilet perineum (2xdobę) and always after contamination; the use of aseptic technique when changing a catheter; placement of the urine collecting bag below the level of the urethra (retrograde protection against backflow of urine), frequent replacement of the bag; catheter patency control at each change of the patient positioning; you can use specialized Silastic catheters (assumed at 6 months), coated with a material that protects from the formation of calcium deposits [26]; the possibility of using urine collecting system of closed type; observation of color, smell, urine, any sampling of urine for testing (under contract); suspected urinary tract infection, u. collection of urine for culture and antibiogram; acidifying diet - Vit.C, herbal medicines, disinfectants; Adequate hydration of the patient-about 2-2.5 liters of liquids per day. Evaluation of nursing. Ensure the right treatment, prevented the application of the recommendations of urinary tract infection, the catheter is patent and normal urine, diuresis was normal.

### PROBLEM 7.

The total deficit of self-care due to progressive disease process. Objective - meet the basic needs of the patient. Implementation of care: Daily Toilet patient (2 times if necessary); Toilet mouth 2 times per day, for example, the use of borax and glycerine; Nose cleansing, greasing (eg paraffin oil), a nasal drip of saline several times a day; Frequent washing of the eyes or the boiled distilled water; Toilet pipe aids, removal of ear wax; frequent patient combing hair, washing hair; fat from the skin such as lotion, olive; length control, clean nails; Daily change of underwear, bed or, if necessary; serving meals, watering of the patient. Evaluation of nursing. Daily care of the patient meets the need to clean the patient, improves the mood.

### PROBLEM 8.

The possibility of postoperative wound infections. Objective - wound infection prophylaxis. Implementation of care: sterile dressing change, depending on the soil-to assist the doctor in the dressing, use of sterile equipment; observation of the skin in the direction of redness, swelling, leakage, any declaration of the fact the doctor; observation of the vacuum drainage derived from the wound - the amount of content, color (note the observation in the card); location of the suction bottle below the patient's body in order to properly drain the contents of the wound; caution during treatments to avoid stretching the suction drain; bacteriological swab collection. Evaluation of nursing. Daily care, observation of surgical wound to prevent wound infection, 7 days after surgery stitches removed. PROBLEM 9.

The pain associated with surgery. Objective - to reduce pain. Implementation of care: observation of pain, its intensity and location, to observe the factors that can trigger pain; the use of non-pharmacological methods that increase the pain threshold, the use of psychotherapy and relaxation techniques of elemental; use of analgesic pharmacotherapy at regular intervals, to prevent the very severe pain, while observing the patient's response to the administration of medication; ensuring a comfortable position in bed, use of facilities; ensuring peace and tranquility; limitation of family visits; cautious, gentle exercise of nursing activities. Evaluation of nursing. Proper measures have reduced nursing pain patient.

#### PROBLEM 10.

Increased body temperature. Objective - to reduce temperature and improve patient well-being. Implementation of care: patient observation, periodic monitoring of the parameters (temperature, RR, heart rate), recorded in the safety observer; conversation with the patient, explain the course of the planned activities in nursing; change of underwear and bed linen, depending on the patient's sweating; performance of the toilet body; moistening the oral mucosa U; provide an increased amount of fluids to drink; administration of drugs to lower body temperature; application of cold compresses; humidify the air in the room; use of an additional blanket; ensuring peace and quiet. Evaluation of nursing. As a result of steps taken the temperature decreased, the patient's mood improved. PROBLEM 11.

The presence of central venous access. Objective - to ensure the patency of central venous access, preventing inflammation in the place of establishment of the cannula. Implementation of care: Daily observation of injection site in terms of inflammation (swelling, redness, pain); sterile dressing change, apply ointment Polseptol, the establishment of such a dressing Venaplast; flushing with heparin sodium injection or drip infusion at a constant infusion pump;

documented in the safety follow-date assumptions, the results of observation; ensuring the purity of the patient and his entourage. Evaluation of nursing. Adequate care of a local injection prevents an inflammatory ensures patency of injection.

## PROBLEM 12.

Problems with the intake of food due to disability, the persistence of dysphagia leading to a dietary deficiency. Objective - to reduce the difficulties in the adoption of food, comfort while eating, to ensure adequate nutrition. Implementation of care: corresponding patient's position during a meal, eg half way up; Sufficient time for a meal, do not urge the patient to take time out to talk with the patient; ensuring the adoption of aesthetic meal (feeding of the base bib), ensuring privacy when sick, rainstorm; corresponding temperature given a meal, the texture (if it is choking the probe to establish fluid administration, provisioning mushy diet); control the position of the probe before each feeding; frequent administration of food-5-6 times a day; to the patient not to talk during the meal (a risk of aspiration of food); administration of food that you like; after eating - each individual performance toilets U cavity, possibly - to wash dentures; encourage families to participate in the administration of patient meals (if no contraindications). Evaluation of nursing. Patient during meals has created the right atmosphere, takes them quite readily, sometimes tired, a little choking. It tolerates the presence of relatives during a meal, their help, preventing inflammation in the place of establishment of the cannula. Implementation of care: daily observation of injection site in terms of inflammation (swelling, redness, pain); sterile dressing change, apply ointment Polseptol, the establishment of such a dressing Venaplast; flushing with heparin sodium injection or drip infusion at a constant infusion pump; documented in the safety follow-date assumptions, the results of observation; ensuring the purity of the patient and his entourage. Evaluation of nursing. Adequate care of a local injection prevents an inflammatory ensures patency of injection. PROBLEM 12.

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## PROBLEM 13.

Fecal excretion of disorders caused by immobilization and the weakening of peristalsis. Objective - the restoration of normal gastrointestinal motility, decreased patient discomfort. Implementation of care: with constipationuse of treatments that improve motility such as abdominal massage, warm compresses to the skin of the abdomen (1 hr after eating), with caution (numbness); eliminate constipation through the use of proper diet-products rich in fiber (fruits, vegetables), sauerkraut juice, buttermilk with flax seeds, yogurt, kefir, coarse cereals, bran, cereal; constant time of meals; adequate fluid intake 2-3 liters per day; treatment of constipation - lactulose, suppositories bisakodyl, enema, paraffin oil, magnesium salts, herbal eg. Xenna; manual extraction of stool in the case of ineffective pharmacotherapy; Auscultation bowel motility; postural repositioning of the patient; establishment of a dry tube rectal discharge intestinal gas. Evaluation of nursing. The use of proper diet, regular administration of relaxants prevents constipation stool in the patient.

### PROBLEM 14.

Fear, anxiety, depression and despair as manifestations of the patient's mental reaction to the disease and its possible consequences. Objective - to help in accepting the disease and disability, improve your mood. Implementation of care: create an atmosphere of security and confidence in dealing with the patient; cooperation with neuropsychology, the inclusion of families to work and rehabilitation; encouraging the patient to a verbalization of their concerns and feelings; show interest and kindness, explaining his doubts, to avoid over-protectiveness; acceptance of patient behavior and responses, a desire not to adopt the attitude of the evaluation of the patient; informing the patient of all treatment procedures and activities performed by him; providing advice regarding the patient's family care problems after discharge to home; facilitate contact with the person of the clergy, if you so wish; ensuring peace and quiet in the hall; attentive patient care; drug eg, fluoxetina. Evaluation of nursing. Support for mental patients, cooperation with a psychologist and family allows the patient to accept the disability and improve moods. PROBLEM 15.

Sleep disturbances caused by the progression of the disease, breathing disorders, fears. Objective - easing discomfort, allowing peaceful sleep at night for example. Implementation of care: the use of mattresses mattress against bedsores pressure variability; posture before sleep in a comfortable position, eg half high; provide suitable conditions in

the room - ventilation, ensuring the peace and quiet, the reduction of lighting; drug hypnotics; preparation and administration of infusion of lemon balm; the presence of the patient, talking with him. Evaluation of nursing. The patient slept most of the night.

## PROBLEM 16.

Lack of knowledge about how families cope with the disability of a relative. Objective - to prepare a patient's family to care for him at home. Implementation of care: providing guidance for daily care of the patient; attention to the need to perform daily rehabilitation exercises; attention to the need for family cooperation in caring for the sick, explains the need to support the patient in these difficult times; attention to the need to adapt the family home conditions to the needs of the patient to facilitate the daily functioning; provide information on institutions, offices where you can get support and assistance needed; help prepare the patient for transport. Evaluation of nursing. Give indications for further patient care helps reduce concerns a family who has the knowledge and skills to minimize the consequences of disability.

Tumors of the spinal cord is an important social problem. The disease and its diagnosis, often they find the patient when he has many plans to accomplish, working, has a family, children, grandchildren. The disease often is diagnosed at the time of substantial completion, an unfavorable prognosis. Paralysis can occur suddenly, causing a significant degree of reduction, lowering the patient's quality of life in poor prognosis worsening health status and life-threatening. Therefore, the most important in the care of patients with cancer of the cervical spinal cord is properly carried out the surgery, symptomatic treatment, which should focus on the ailments suffered by the patient, proper care to prevent serious complications [1, 2, 14, 28].

Aim of the study was achieved by showing the problems with which the nurse may encounter takes care of the operated patients with cancer of the cervical spinal cord. Presented patient care problems, only passing a care deficit nursing care and risk of postoperative complications. Along with the deteriorating state of general neurological patient may lead to emotional disturbances as a consequence of disease progression. An important step in care, is to prepare families to care for the patient at home, that she was prepared to appropriate care after discharge the patient home. The next stage of this work are nurse-care problems occurring in a patient after surgery. The main problems with which we can meet it: the risk of cardiovascular and respiratory disorders, exposure to pressure sores, pulmonary embolism. Patient care requires a holistic in conjunction with self-care deficit, is passed off to people caring and supporting family. An important issue raised in the work, is worsening the patient's neurological status. Palsy, which occurred in a patient leads to a deterioration in the patient's mental status, a reluctance to life, rising feelings of helplessness. From the abovementioned problems show that patient care should be designed so that little to alleviate the effects of the disease, prevent serious complications, reduce troublesome symptoms such as shortness of breath, or problems with food intake. Besides the medical aspect of care is also important to the environment and the environment in which the patient resides. It is very important to show kindness, understanding, finding quiet time to perform all these steps, finding the time to talk with the patient and his family. The above-mentioned activities and treatments undertaken by a nurse can certainly help to reduce patient discomfort, to divert attention from thinking about the disease and improve their general well being. Another task facing the nurse is to prepare families to care for the patient at home. Prepare the patient's family to care for the sick at home already during the hospital stay. Relatives should be actively involved in patient care, nurse, spy on how the body performs, eg toilets, changing postural position. In addition, the nurse should provide guidance for the comprehensive care rather difficult. Why not give the family advice on how to prepare for the return of apartment of a disabled person to make it easier to perform basic operations on patients. Should refer the family to specialized institutions providing much needed assistance and support [1, 2, 6, 10, 13, 18, 24, 26-32].

### Conclusions [2, 6, 10, 13, 18, 21, 27]:

1. Malignant cervical spinal cord represent a huge medical problem, both because of the inability to remove the tumor in a significant number of patients and a very serious care problems associated with the occurrence of patient tetraplegia paralysis, respiratory distress due to respiratory muscle weakness, sometimes the diaphragm.

2. In patients with malignant tumors, the prognosis is bad and inevitably there are concurrently increasing complications tetraplegia paresis, sphincter disorders, there may be a risk of pulmonary embolism, dysphagia, the risk of bedsores.

3. Proper care process and helps to avoid the strict fulfillment of a number of possible complications, reduce patient suffering, cause its more comfortable, both in the physical realm, and what is more important in the psychological sphere.

4. While the nurse is always survives the death of the patient and it is difficult to reconcile with her, especially if it is sudden death, should be aware that sometimes it is a better way than the situation in which survive the irreversible damage and disability. The life of a patient in whom there was a severe impairment, is certainly not the life that we want for ourselves or our families, in which case you should try is simply no extra effort to extend, to ensure good patient, gentle care and reduce the pain.

5. An integral and extremely important element is the education of the patient's family in the comprehensive care of it and prepare it for generally fast and inevitable death.

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