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Planning nursing care for a patient diagnosed with testicular cancer by using International Classification for Nursing Practice (ICNP®)

Abstract

Testicular cancer is the most common malignancy in young men and its prevalence is increasing all over the world. The diagnosis of such a life-threatening disease at a relatively young age may have a considerable devastating impact on numerous spheres of everyday functioning. Although testicular cancer treatment is highly effective, in some cases only symptomatic treatment is possible, an integral part of which is specialist nursing care. This study aimed to present the possibility of using the terminology of the International Classification for Nursing Practice (ICNP®) in planning nursing care for a hospice patient suffering from advanced testicular cancer. An analysis of medical records allowed for developing a patient's case and then formulating a plan of nursing care considering diagnoses concerning biopsychosocial functioning and nursing intervention. Moreover, the study highlights typical problems of patients in the period of dying as well as the role of a nurse in hospice care.

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Key words: testicular cancer, nursing plan, hospice care, International Classification for Nursing Practice ICNP®

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Introduction

Testicular cancer is one of the most common malignancies in men aged between 14 and 44 [1] and accounts for 1% of all diagnosed cases of cancer in men all over the world [2]. The incidence rate of testicular cancer is widely varied with the highest prevalence recorded in the countries of northern Europe [2]. However, in the last few decades, an increase in the incidence of this form of cancer has also been recorded in western countries [1]. In Poland in 2018 as many as 1145 men were diagnosed with malignant testicular cancer, most of whom came from Mazowieckie (179) and Wielkopolskie (129) provinces [3]. These figures indicate that the incidence rate increased by 81 patients as compared to 2010 [4]. Despite good survival rates, the disease accounts for 0.3% of all deaths caused by malignant neoplasms in men in Poland [3]. There are two main types of germ cell tumours: seminoma and non-seminoma tumours, the latter being slightly less frequent [2] and tending to grow faster and metastasize [5]. In the case of non-seminoma tumours, the five-year survival rate reaches 99% in the early stages and from 48% to 91% in more advanced or metastatic stages of the disease [5].

In the clinical picture of testicular cancer, a hard lump or changes in the testicle texture can be observed, which may be accompanied by pain, swelling or a sensation of heaviness in the scrotum. Along with the advancement of the tumour, there appear symptoms connected with the location of metastases, which include gastrointestinal symptoms, headache, pain in the sacrum area, respiratory symptoms (cough, dyspnoea and haemoptysis) or gynecomastia [6, 7]. Unfortunately, low awareness of the disease and its prevention among young men causes that testicular cancer is often diagnosed in a significant stage of its clinical advancement [7]. A diagnosis of testicle non-seminoma tumours is accompanied in as many as 60% of patients by a simultaneous diagnosis of metastatic changes [2]. Although the applied surgical treatment, radiotherapy or chemotherapy can be very effective [5], it does not change the fact that some patients may require symptomatic treatment, an integral part of which is specialist nursing care.

It should be noted that current recommendations of the National Institute for Health and Care Excellence on taking care of adults in the last days of their lives emphasize the importance of providing these patients with individualized care through developing and documenting a proper nursing plan and updating it according to patients' clinical condition and their changing preferences [8].

The International Classification for Nursing Practice (ICNP®) is one of the tools recommended in the process of developing and documenting nursing care plans as it provides not only a set of ready-to-use phrases defining various diagnoses, interventions and results applicable in various aspects of nursing [9] but also a wide variety of terms which help in independent defining specific concepts [10]. The Classification has a multi-axis structure and includes axes such as Action, Client, Focus, Judgement, Location, Means and Time [11]. A combination of terms from different axes is recommended for the independent formulation or of detailing diagnosis and nursing interventions [10]. The ICNP® dictionary with the International Statistical Classification of Diseases and Related Health Problems belongs to the World Health Organization family of taxonomies. It contains several thousand terms, and each term has a separate identifying code of eight digits [12]. The study aimed to present the possibility of using the terms of the International Classification for Nursing Practice (ICNP®) in planning nursing care for a hospice patient diagnosed with advanced testicular cancer. An analysis of medical records allowed for developing a patient's case and then formulating a plan of nursing care.

Case presentation

A 23-year-old man was diagnosed with a non-seminoma tumour in his right testicle and 6 years ago underwent a right-sided orchidectomy followed by chemotherapy. General deterioration of his health condition was observed with symptoms such as weakness, pain and vomiting. Diagnostic tests showed metastases to the liver, peritoneum and lungs. The patient was referred to a hospice for symptomatic treatment because of the rapidly deteriorating state of health. On the day of hospice admission, the patient was allopsychically and autopsychically oriented. He was aware of the diagnosis and not reconciled with his short survival prognosis. The patient complained of acute pain in the area of his right hypochondrium, vomiting with food content and severe weakness. No bowel movement for three days. A Foley catheter in the urinary bladder (straw yellow urine, about 500 ml per day). Subcutaneous "butterfly" needle in the outer part of the left arm.

In a physical examination: dry and pale skin, poorly developed subcutaneous tissue, marked swelling of lower limbs, lip cracks and fissures, dry, pale and lustreless oral mucosa. The patient's efficiency was estimated at 20% according to the Palliative Performance Scale, which meant that he stayed in bed, was incapable of any physical activity and could drink small

Table 1. Nursing care plan: physical and psychosocial state — part I

Diagnosis	Nursing interventions
	PHYSICIAL STATE
Cancer Pain [10003841] + Severe [10025877] + Abdominal Cavity [10000010] + Unilateral [10026732] + Right [10017234] + Chronic [10004395] + Present [10015581]	Assessing Pain [10026119]
	Medication Handling [10040708] + Subcutaneous Route [10018963] + Transdermal Route [10020011]
	Positioning Patient [10014761] + Body Position [10003433] + Comfort [10004655]
	Providing Emotional Support [10027051] + Presencing [10015575]
	Providing Nursing Care Coordination [10046465]
	Relieving [10016716]
	Monitoring Pain [10038929]
	Documenting [10006173]
Lymphatic Oedema [10031661] + Lower Body [10029303] + Large [10011116]	Collaborating With Physiotherapist [10050378]
	Collaborating With Physician [10023565]
	Observing [10013474]
	Skin Care [10032757]
	Positioning Patient [10014761]
Pressure Ulcer [10025798] Sacrum [10017402]	Assessing Pressure Ulcer [10040847]
	Pressure Ulcer Care [10032420]
	Wound Dressing Change [10045131]
	Monitoring Wound Healing [10042936]
	Positioning Patient [10014761]
	Changing [10004162] + Bed Linen [10003175]
	Evaluating Wound Healing [10007218]
Constipation [10000567] Medication Side Effect [10022626]	Treating Constipation [10044729]
	Performing Enema [10043618]
	Administering Medication [10025444]
	Assessing Bowel Status [10036475]
	Assessing Faeces [10050172]
	Providing Adequate Water Supply [10038509]
	Managing Medication Side Effect [10021837]
Vomiting [10025981]	Assessing [10002673] + Vomiting [10020864]
	Medication Handling [10040708] + Subcutaneous Route [10018963]
	Assessing Food Intake [10050091]
	Monitoring Fluid Balance [10040852]
	Assessing Risk For Dehydration [10040932]
	Oral Care [10032184]
	Elimination [10006720] + Foul Odour [10008206]
	Positioning Patient [10014761] + Position [10014788] + Upper [10020325]

Source materials: Own study based on the International Classification for Nursing Practice [11]

Table 2. Nursing care plan: physical and psychosocial state — part II

Diagnosis	Nursing interventions
	PHYSICIAL STATE
Risk For Infection [10015133] + Urinary System [10020421]	Preventing Infection [10036916]
	Perineal Care [10045154]
	Assisting With Toileting [10023531]
	Measuring Fluid Output [10039250]
	Assessing Fluid Balance [10037881]
	Managing Urinary Catheter [10031977]
	Urinary Catheter Care [10033277]
Dry Mucous Membrane [10006351] Oral Cavity [10013720]	Assessing Oral Status [10044202]
	Assessing Oral Hygiene Pattern [10037913]
	Assessing Eating Or Drinking Behaviour [10002747]
	Assessing Water Supply [10037932]
	Oral Care [10032184]
	Promoting Oral Hygiene [10032483]
	Monitoring Nutrition [10036032]
	Monitoring Fluid Intake [10035303]
Dyspnoea [10029433]	Assessing Respiratory Status [10036786]
	Monitoring Blood Oxygen Saturation Using Pulse Oximeter [10032047]
	Assessing Needs [10033368] + Patient [10014132]
	Maintaining Airway Clearance [10037351]
	Positioning Patient [10014761] + Position [10014788] + Upper [10020325]
	Observing [10013474]
	PSYCHOSOCIAL STATE
Impaired Acceptance Of Health Status [10029480]	Assessing Acceptance Of Health Status [10026249]
	Providing Emotional Support [10027051]
	Providing Spiritual Support [10027067]
	Supporting Psychological Status [10019161]
	Facilitating Ability To Communicate Feelings [10026616]
	Promoting Hope [10024440]
	Maintaining Dignity And Privacy [10011527]
Impaired Family Coping [10034789] Mother [10027257] Family Grief [10038476]	Assessing Family Coping [10026600]
	Providing Emotional Support [10027051]
	Accompanying [10042609]
	Supporting Dignified Dying [10041254]
Agitation [10002035]	Assessing Anxiety [10041745]
	Providing Emotional Support [10027051]
	Supporting Dignified Dying [10041254]
	Supporting Psychological Status [10019161]
	Accompanying Patient [10042613]
	Hand Holding [10008642]
	Medication Handling [10040708] + Subcutaneous Route [10018963]

Source materials: Own study based on the International Classification for Nursing Practice [11]

amounts of liquids. A 3° pressure ulcer according to the Torrance scale could be observed on the sacrum (measuring 5 × 6 cm, no exudation, bleeding, pain or symptoms of infection). The pressure ulcer is protected with hydrocolloid dressing. Vital parameters on admission: blood pressure 110/60 mm Hg, heart rate 150 bpm, respiratory rate 18 breaths/min, blood oxygen saturation 95%, body temperature 36.7°C. During the last 24 hours of the patient's life there appeared also dyspnoea at rest (blood oxygen saturation ranging from 87% to 90%) and psychomotor anxiety.

The patient's mother was present by his side all the time and she was actively involved in nursing care. The woman experienced sadness, helplessness and a sense of guilt. The patient's father died in a car accident 10 years ago (Tables 1, 2).

Discussion

The proposed care plans were based on a catalogue available on the Internet, which can be used on the official website of the International Council of Nurses [11]. The diagnoses identified addressed both the patient's physical symptoms (pain, vomiting, dyspnoea, lymphedema) and psychosocial problems. They were developed independently based on terms from the axes Focus, Location, Time, Judgment, Client or ready-made diagnoses were used (e.g. Impaired Acceptance of Health Status) [11]. Among the available terminology describing nursing interventions, those were selected that refer to mainly non-pharmacological methods of nursing management and are relevant to improving the quality of life of palliative/hospice care patients. Thus, the presented care plan included interventions such as Promoting Hope, Providing Emotional Support, Presenting, Relieving and Hand Holding [11].

The analysis confirmed that the International Classification for Nursing Practice (ICNP®) enables the planning of individualized nursing care for patients with chronic diseases, including those in the terminal stage of cancer. This is also confirmed by numerous publications on the use of this classification in nursing practice [13–15]. However, continued limitations on available terms can make it difficult to create care plans, which justifies the need to further develop the available terminology.

Conclusions

1. Despite a positive prognosis of advanced testicular cancer, some patients may require palliative and hospice care.
2. Although the ICNP® terminology used in this study includes a wide variety of terms that can be used in developing a nursing plan for hospice patients, formulating some nursing diagnoses was difficult due to limitations of currently available terminology, which could be observed, for example, in the case of subcutaneous "butterfly" needle which is a common medical procedure in palliative and hospice care.
3. Important elements of the presented nursing plan are nursing interventions which are aimed at bringing relief to patients and maintaining patients' dignity in the last moments of their lives.
4. The study shows that it is necessary to develop the terminology even further to define the needs and problems of patients and their informal caregivers more precisely and, in consequence, to ensure a greater individualization of nursing care.

Declaration of conflict of interests

The authors declares that there is no conflict of interest.

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