

CARE PLAN FOR PREGNANT AND POSTPARTUM WOMAN WITH DIAGNOSED CANCER – METASTATIC LYMPHOMA

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A. Study design/planning • B. Data collection/entry • C. Data analysis/statistics • D. Data interpretation • E. Preparation of manuscript • F. Literature analysis/search • G. Funds collection

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ABSTRACT

The diagnosis of a disease in a patient such as mediastinal lymphoma leads to complications and a sharp drop in mood. A skilled midwife can provide holistic and individualised care for both healthy and sick women. In caring for pregnant and postpartum women diagnosed with mediastinal lymphoma, the midwife undertakes care and education intervention aimed at improving the patient's comfort and self-care skills. Implementing the assumed measures eliminates risk factors for the occurrence of care problems, providing support for the woman during the disease. The aim of the paper is to present the plan of care provided to a pregnant and postpartum woman diagnosed with mediastinal lymphoma based on an individual case study. For the creation of this study a "study case" research method was used. Informed consent was obtained in the study. The C-HOBIC care outcome indicators and reference terminology were used during the case report.

Key words: postpartum period, nurse-midwives, haematological pregnancy complications, lymphoma large B-cell diffuse.

INTRODUCTION

Pregnancy and the postpartum period comprise a special and unique time in a woman's life, which is associated with various emotions including anxiety. Women, in their concern for their newborn, pay little attention to their own health. Cancer during pregnancy is understood to mean the diagnosis of a malignant tumour between conception and 12 months postpartum [1]. Cancer poses a deadly threat in both pregnant and postpartum women. They are a rare phenomenon recognised in only 0.02-0.1% of all pregnancies. The increasingly later age at which women decide to have a child is an undeniable reason for the increased incidence of cancer in pregnancy. It is a problem that affects 81-140 of 100,000 pregnancies. Among the most common cancers in pregnancy, lymphoma is ranked fourth (11%) [2].

According to the World Health Organization, cancers of the lymphatic system can be divided into different units on the basis of morphological features, genetics, and clinical presentation, among others, primary mediastinal large B-cell lymphoma (PMBL), Hodgkin's lymphoma (cHL), and B-cell lymphoma

unclassified with intermediate features between diffuse large B-cell lymphoma (DLBCL) and cHL [3, 4]. The first symptoms of the disease, such as appetite disorder, nausea, and vomiting, may overlap with pregnancy symptoms. In some cases, this is compounded by fever, night sweats, and persistent itching of the skin. The slow progression of the disease and the lack of clear symptoms result in delayed diagnosis of lymphoma along with late treatment. The diagnosis of lymphoma is based on histopathological examination of the involved lymph node. Non-contrast magnetic resonance and ultrasound are also acceptable [4-6].

When deciding whether to treat metastatic lymphoma during pregnancy, the stage of the disease, gestational age, and foetal development should be considered. Medical staff, including the midwife, should ensure the greatest possible benefit to the woman's health while preserving her ability to have children in the future. Clinical management is selected individually taking into account the above-mentioned factors. In the first trimester, depending on the severity of the disease, treatment is post-

poned until the 2nd trimester or local radiation with recommended shielding. If diagnosed in the 2nd and 3rd trimesters, and the woman and foetus are stable, a waiting strategy or chemotherapy every 2 weeks is recommended. The dose interval allows the midwife to monitor foetal response and development. Chemotherapy should be stopped for at least 3 weeks prior to planned childbirth due to potential healing disorders and the risk of haematological complications in the mother and the newborn. Systemic treatment after 28 weeks of pregnancy and postpartum is an absolute contraindication to breastfeeding. Occasionally, when lymphoma is diagnosed in the 3rd trimester, termination of pregnancy by caesarean section should be considered and treatment should be started immediately [2, 5, 7-9].

The role of the midwife during the treatment of an oncology patient is to support her in the emotionally using factual knowledge of world care, to carry out nursing procedures, and to know the complications of the oncology treatment. The midwife caring for the patient should minimise the risk of possible disorder to facilitate adaptation to the new life situation. The tasks of the midwife during hospitalisation of the patient include, among others, monitoring the well-being of the foetus using cardiotocography, promoting pro-health behaviours, collecting material for diagnostic tests, preventing venous thromboembolism complications, and taking care of physical and psychological comfort before the planned surgical procedure [10-12].

The aim of the presented paper is to present the plan of care provided to a pregnant and postpartum woman diagnosed with mediastinal lymphoma based on the stage of the individual case.

MATERIAL AND METHODS

For the creation of this study, the “study case” research method was used. It involves the collection of information on the subject of the study and their in-depth analysis, which is the basis for making a diagnosis and planning appropriate action to solve the problems noted. In the present study, the subject is a pregnant and postpartum woman burdened with cancer – mediastinal lymphoma. During the development of the individual case study, the following techniques were used to gather information about the patient: in-depth observation and analysis of medical records [13]. Patient consent was obtained for the use of medical records in this qualitative study. Care outcome indicators C-HOBIC and reference terminology ICNP® available on the International Council of Nurses website were also used during the case report [14]. As a result of the analysis of the collected data, nursing diagnoses, intervention, and evaluation were established.

STUDY CASE

A 31-year-old patient diagnosed with primary mediastinal lymphoma was admitted to the hospital for supraclavicular and mediastinal lymphadenopathy for further diagnosis for cHL. The woman was with twin pregnancy, 34 weeks pregnant, pregnancy number 3, delivery 2, Group B *Streptococcus* positive. The first birth was by natural means in 2020. The patient was after spontaneous miscarriage at 8 weeks of pregnancy in 2021. The main complaints during admission were night sweats, fever, infection, exertional dyspnoea, weakness, herpes labialis, and swelling of the left upper limb. The patient had been under the care of the Women’s Health Clinic since she was 13 weeks pregnant. The pregnant woman was additionally burdened with comorbidities – grade 3 obesity (BMI 45.9), hypothyroidism, superior vena cava syndrome, tumour lysis syndrome, and vitamin B₁₂ deficiency. A high risk of venous thromboembolism was found due to active cancer and body weight. On palpation, a palpable tumour was found in the left supraclavicular region, and she was qualified for diagnostic retrieval of enlarged supraclavicular lymph nodes.

The patient was admitted on the first day after right cervical lymph node excision to the Pregnancy Pathology Department. The ward administered venous thromboembolism prophylaxis in the form of low-molecular-weight heparin injection. The heart rates of both foetuses were monitored every 3 hours. Pallor of the skin and swelling of the left forearm and hand were observed – kinesiotaping was applied. During care, the woman was noted to have a lowered mood due to illness and anxiety about her offspring. The patient benefited from psychological consultation. Due to the confirmation of diffuse large B-cell lymphoma and the need to implement chemotherapy, it was decided to terminate the pregnancy by caesarean section at 36 weeks’ gestation.

The postpartum woman was admitted to the Obstetric Department in good general condition, without newborns. The patient exhibited lowered mood due to the newborns’ stay in the Neonatology Clinic and complaints of pain in the wound area after the caesarean section. The postpartum woman was concerned about cancer progression and prognosis. The newborns were transferred to the patient’s room on the second day after the delivery in good condition. Due to chemotherapy, lactation-inhibiting drugs were included. The postpartum woman fed the newborns with formula through a pacifier. There was an observed drop in mood associated with the inability to breastfeed the children. On the third postnatal day, the diagnosis and differentiation on mediastinal lymphoma was supplemented by a computed tomography scan of the head, neck, and chest with contrast. In addition, a central puncture was inserted under ultrasound and X-ray

guidance. On the fourth postnatal day, the newborns were transferred back to the Neonatology Department for continuity of care, and the postpartum woman was transferred to the general Haematology Department for initiation of systemic treatment.

CARE PLAN

The assessment was based on the functional status rating scale (ADL scale) according to C-HOBIC terminology for acute care (Table 1) and the C-HOBIC dyspnoea assessment scale – terminology for all areas of care (Table 2). Using observation and analysis of medical records, a care plan (Table 3) was created based on the ICNP® classification.

SUMMARY

The essence of the midwives role during hospitalisation of pregnant and postpartum women diagnosed with mediastinal lymphoma is to support and holistically care for the woman. Accompanying a sick woman provides her with a sense of intimacy and security. The midwife, having substantive knowledge in the field of obstetrics and the basics of nursing as a professional, monitors the welfare of the foetus, analyses medical documentation, collects material for laboratory tests, and, in case of diagnosis of abnormalities, notifies the attending physician. The individual care plan identifies nursing problems in the

Table 1. Functional status assessment by C-HOBIC terminology for acute care

C-HOBIC	HOBIC code	Diagnosis according to ICNP
Bathing	0	Able to bath [10028224]
Personal hygiene	1	Impaired ability to perform hygiene [10000987]
Walk in the room	2	Impaired walking [10001046]
Transfer toilet	1	Impaired ability to transfer [10001005]
Toilet use	0	Able to toilet self [10028314]
Bed mobility	0	Able to move in bed [10029240]
Eating	0	Able to feed self [10028253]

Table 2. C-HOBIC dyspnoea assessment – terminology for all areas of care

Scale	Description according to C-HOBIC	Diagnosis according to ICNP
0	Symptoms absent	No dyspnoea [10029264]
1	Absent at rest, present at moderate activity	Functional dyspnoea [10029414]
2	Absent at rest, present at daily activity	Functional dyspnoea [10029414]
3	Present at rest	Resting dyspnoea [10029422]

Table 3. Care plan

Diagnosis 1 – Cancer pain [10003841]		
Interventions (A/IC)	Means (M)	Location (L)
Administering pain medication [10023084]	<i>Analgesic [10002279]</i>	Immune system component [10025073]
Minimising [10012080]	<i>Medication [10011866]</i>	
Identifying attitude toward pain [10009654]	<i>Nurse [10013333]</i>	
Outcome: reduced pain [10027917]		
Diagnosis 2 – Depressed mood [10022402]		
Interventions (A/IC)	Means (M)	Time (T)
Assessing depressed mood [10026055]	<i>Nurse [10013333]</i>	Perinatal period [10026038]
Providing emotional support [10027051]	<i>Questionnaire [10016229]</i>	Postpartum period [10025906]
Collaborating with interprofessional team [10039416]		
Outcome: decreased depressed mood [10027901]		
Diagnosis 3 – Risk for complications during pregnancy [10023225]		
Interventions (A/IC)	Means (M)	
Measuring foetal movement [10043455]	<i>Nurse [10013333]</i>	
Measuring foetal heart rate [10043440]	<i>Monitoring device [10012177]</i>	
Monitoring foetal development [10046340]	<i>Assessment tool [10002832]</i>	
Outcome: no complications during pregnancy [10042446]		
Diagnosis 4 – Wound pain [10021243]		
Interventions (A/IC)	Means (M)	Location (L)
Administering pain medication [10023084]	<i>Analgesic [10002279]</i>	Abdomen [10000023]
Identifying attitude toward pain [10009654]	<i>Medication [10011866]</i>	
Teaching about wound care [10034961]	<i>Nurse [10013333]</i>	
Outcome: reduced pain [10027917]		

Table 3. Care plan (continued)

Diagnosis 5 – Interrupted breastfeeding [10000774]		
Interventions (A/IC)	Means (M)	
Administering medication [10025444]	Nurse [10013333]	
Promoting self-esteem [10024455]	Feeding bottle [10007793]	
Teaching about infant feeding [10037139]	Medication [10011866]	
Feeding infant with a bottle [10035168]		
Outcome: bottle feeding [10003582]		
Diagnosis 6 – Risk for impaired parent child attachment [10027203]		
Interventions (A/IC)	Means (M)	
Promoting skin to skin technique [10035361]	Nurse [10013333]	
Promoting caregiver child attachment [10035342]	Skin to skin technique [10035357]	
Providing emotional support [10027051]		
Outcome: effective caregiver child attachment [10028658]		
Diagnosis 7 – Risk for infection [10015133]		
Interventions (A/IC)	Means (M)	Location (L)
Preventing infection [10036916]	Nurse [10013333]	Urinary system component [10020432]
Monitoring signs and symptoms of infection [10012203]	Assessment tool [10002832]	
Use aseptic technique [10041784]		
Teaching about urinary catheter care [10045257]		
Outcome: no infection [10028945]		
Diagnosis 8 – Functional dyspnoea [10029414]		
Interventions (A/IC)	Means (M)	Location (L)
Monitoring respiratory status [10012196]	Nurse [10013333]	Thorax [10019692]
Monitoring blood oxygen saturation using pulse oximeter [10032047]	Monitoring device [10012177]	
Positioning patient [10014761]	Assessment device [10002734]	
	Pulse oximeter [10032551]	
	Positioning technique [10014774]	
Outcome: no dyspnoea [10029264]		
Diagnosis 9 – Peripheral oedema [10027482]		
Interventions (A/IC)	Means (M)	Location (L)
Skin care [10032757]	Nurse [10013333]	Arm [10002504]
Collaborating in fluid therapy [10030948]		
Managing oedema [10036793]		
Outcome: no peripheral oedema [10029020]		
Diagnosis 10 – Impaired ability to perform hygiene [10000987]		
Interventions (A/IC)	Means (M)	Time (T)
Assessing readiness to learn [10002781]	Nurse [10013333]	Postoperative period [10027242]
Teaching about perineal care [10045165]		
Assisting [10002850]		
Outcome: able to perform hygiene [10028708]		
Diagnosis 11 – Impaired walking [10001046]		
Interventions (A/IC)	Means (M)	Time (T)
Teaching how to increase activity tolerance [10024660]	Nurse [10013333]	Postoperative period [10027242]
Assessing ability to walk [10038917]		
Assessing coping [10002723]		
Outcome: able to walk [10028333]		

patient. By implementing the previously established measures, it eliminates the risk factors for nursing problems, providing indispensable support for pregnant and postpartum women during the course of cancer. It should also be emphasised that midwives, when caring for the patients, are free to use ICNP® terminology and construct care plans appropriate to their needs.

CONCLUSIONS

Due to the rarity of metastatic lymphoma as a complication of pregnancy, there is no specific course of action. Further work needs to be done on an appropriate algorithm to provide holistic care and emotional support to the pregnant and postpartum woman in disease. The analysis of an individual case

study and available literature allowed us to create a universal care plan for pregnant and postpartum woman diagnosed with mediastinal lymphoma. This study shows the role of the midwife as a professional who monitors the well-being of both the patient and the foetus with the participation of her professional competences. In addition, the midwife has substantive knowledge in the field of recognising the symptoms of cancer during pregnancy and is an irreplaceable support for a woman during the disease.

Disclosure

The authors declare no conflict of interest.

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