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**NURSING CARE FOR PUERPERAL WOMEN
WITH ENDOMETRITIS: CASE REPORT**

**CUIDADOS DE ENFERMAGEM À PUÉRPERA
COM ENDOMETRITE: RELATO DE CASO**

**ATENCIÓN DE ENFERMERÍA A MUJERES POSPARTO
CON ENDOMETRITIS: INFORME DE CASO**

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Abstract

Background: Complications can occur in the postpartum period. Endometritis is the most common febrile complication, typically caused by bacteria ascending from the lower genital tract or gastrointestinal tract. **Objective:** To describe the nursing care provided to a postpartum woman with endometritis, highlighting the interventions performed and their impact on the woman's clinical outcome.

Methodology: Case report of a 28-year-old postpartum woman, with dystocic ventouse delivery at 40 weeks + 5 days, who presented to the emergency room on the 5th postpartum day due to fever, pain, and foul-smelling lochia. Nancy Roper's theoretical model was used for data collection, and the International Classification for Nursing Practice taxonomy was used to develop the nursing care plan. **Results:** Seven nursing diagnoses were identified, of which two stood out as relevant to the clinical situation.

Conclusion: Through the proposed specialized care, it was possible to stabilize the postpartum woman's clinical condition, reducing the risks associated with puerperal endometritis and promoting an effective recovery, highlighting the importance of a well-structured care plan for the positive evolution of the clinical condition.

Keywords: Endometritis; Infection; Nursing Care; Postpartum Period.

Resumo

Enquadramento: No período de pós-parto podem ocorrer complicações. A Endometrite constitui a complicação febril mais frequente, sendo tipicamente causada por bactérias que ascendem do trato genital inferior ou do trato gastrointestinal. **Objetivo:** Descrever os cuidados de enfermagem prestados a uma puérpera com endometrite, destacando as intervenções realizadas e seus impactos na evolução clínica da mulher. **Metodologia:** Relato de caso referente a uma puérpera de 28 anos, parto distócico de ventosa às 40 semanas + 5 dias, que recorreu ao serviço de urgência ao 5.º dia após o parto por febre, dor e lóquios fétidos. Para a colheita de dados foi utilizado o Modelo teórico de Nancy Roper e para a realização do plano de Cuidados de Enfermagem foi utilizada a taxonomia da Classificação Internacional para a Prática de Enfermagem. **Resultados:** Foram identificados sete diagnósticos de enfermagem, dos quais se destacaram dois como sendo os relevantes para a situação clínica. **Conclusão:** Através dos cuidados especializados propostos, foi possível estabilizar a condição clínica da puérpera, diminuindo os riscos associados à endometrite puerperal e promovendo uma recuperação eficaz, evidenciando a importância de um plano de cuidados bem estruturado para a evolução positiva do quadro clínico.

Palavras-chaves: Cuidados de Enfermagem; Endometrite; Infecção; Período Pós-Parto.

Resumen

Antecedentes: Pueden presentarse complicaciones en el puerperio. La endometritis es la complicación febril más común, generalmente causada por bacterias que ascienden desde el tracto genital inferior o el tracto gastrointestinal. **Objetivo:** Describir la atención de enfermería brindada a una mujer con endometritis en el puerperio, destacando las intervenciones realizadas y su impacto en el pronóstico clínico. **Metodología:** Reporte de caso de una mujer de 28 años en el puerperio, con parto distócico por ventosa a las 40 semanas + 5 días, que acudió a urgencias el quinto día del puerperio por fiebre, dolor y loquios malolientes. Se utilizó el modelo teórico de Nancy Roper para la recopilación de datos y la taxonomía de la Clasificación Internacional para la Práctica de Enfermería para desarrollar el plan de atención de enfermería. **Resultados:** Se identificaron siete diagnósticos de enfermería, de los cuales dos resultaron relevantes para la situación clínica.

Conclusión: Mediante la atención especializada propuesta, se logró estabilizar el estado clínico de la puérpera, reduciendo los riesgos asociados a la endometritis puerperal y promoviendo una recuperación eficaz, destacando la importancia de un plan de cuidados bien estructurado para la evolución positiva del estado clínico.

Descriptor: Atención de Enfermería; Endometritis; Infección; Puerperio.

Introduction

The postpartum period begins immediately after childbirth and continues until the mother's body fully recovers, lasting up to six weeks. This period is divided into three phases: immediate (first 24 hours), early (first week after childbirth), and late (up to six weeks after childbirth). During this period, women experience various physiological and emotional changes⁽¹⁾. Although it is a natural process, the puerperium is associated with potential maternal consequences, with puerperal infection being one of the most relevant due to its relationship with maternal morbidity and mortality⁽²⁾.

Puerperal infection is defined as any bacterial infection that occurs in a woman's reproductive tract in the postpartum period, generally within the first 10 days after birth, with the exception of breast infections⁽³⁾. Among these infections, postpartum endometritis is the most common, characterized by inflammation of the decidua, which can extend to the myometrium (myometritis) and parametrium (parametritis)⁽⁴⁾. Clinically, it was defined as the presence of puerperal fever in association with one or more of the following symptoms: uterine tenderness, foul-smelling lochia, and leukocytosis $> 12,000$ after excluding another site of infection, which develop within the first 5 days after delivery⁽⁵⁾.

Puerperal endometritis is mainly caused by ascending microorganisms from the lower genital and gastrointestinal tract, the most common being *Escherichia coli*, group B *Streptococcus* and anaerobes such as *Bacteroides spp*⁽⁶⁾. Some conditions increase the risk of developing infection, including prolonged labor, premature rupture of membranes (> 18 hours), multiple intrapartum vaginal examinations, cesarean delivery, retained placenta, and manual removal of the placenta.

Complications of endometritis include anemia due to systemic inflammation and increased blood loss, decreased milk production due to changes in the hormonal regulation of lactation, and septic shock, a serious complication with mortality rates between 10% and 30%⁽⁵⁾. Standard treatment for postpartum endometritis includes intravenous broad-spectrum

antibiotic therapy, such as a combination of clindamycin and gentamicin, administered until the postpartum woman remains afebrile for 24 to 48 hours⁽⁷⁾.

In this context, nursing care is essential for prevention, early identification, and care for postpartum women with endometritis, helping to reduce complications and promote proper recovery. Furthermore, health education and guidance on warning signs can help prevent and recognize the infection early, promoting a safer postpartum period⁽²⁾. This case report aims to describe the nursing care provided to a postpartum woman with endometritis, highlighting the interventions performed and their impact on the woman's clinical evolution.

Methodology

This case report is descriptive and observational in nature, aiming to present, in a narrative format, the nursing diagnoses, interventions, and outcomes related to a postpartum woman with endometritis, enabling scientific and educational development. The structure of this study follows the guidelines of Case Report (CARE) and was organized according to the flowchart model of Equator Network (2019)⁽⁸⁾.

The research was conducted in an academic learning environment, in a hospital unit in Portugal, during the months of February and March 2025. Data collection was performed during the hospitalization period of the mother and newborn, in the Obstetrics and Gynecology Service, allowing the observation and analysis of the puerperal woman with postpartum endometritis.

In accordance with the guidelines of the Code of Ethics of the Order of Nurses (OE), and in accordance with Article 106 of Law No. 156/2015, of September 16, the identity of the postpartum woman and newborn, as well as the healthcare institution, were safeguarded, ensuring anonymity and confidentiality of information. The patient was duly informed of her rights, and her informed consent was requested, in accordance with the ethical principles established by the Declaration of Helsinki and the Oviedo Convention for research involving human subjects.

To implement the nursing process, the Activities of Daily Living (ADL) Theory by Nancy Roper, Logen, and Tierney was used. This model aims to promote self-satisfaction in daily activities, allowing the provision of individualized care focused on the needs of the postpartum woman⁽⁹⁾. The work was prepared based on the International Classification for Nursing Practice (ICNP®), version 2015⁽¹⁰⁾, to ensure standardization and consistency in the documentation of nursing diagnoses and interventions.

Data collection included interviews, history taking, observation and physical examination of the postpartum woman. Based on the information obtained, an initial assessment was conducted based on Nancy Roper's Nursing Model⁽⁹⁾, which allowed the formulation of nursing diagnoses using ICNP® (2015). Based on the diagnoses, the nursing interventions to be implemented were outlined, with the aim of achieving the expected results.

The final phase of the nursing process consisted of implementing the interventions and evaluating the results, interpreting the data obtained from the care plan, monitoring the clinical progress of the puerperal woman and adjusting the interventions as necessary.

Discussion

The postpartum period is a physiologically critical period for women, during which they experience intense physical and emotional transformations. During this period, women are vulnerable to complications such as postpartum infections, particularly postpartum endometritis, one of the most common infections, characterized by an inflammatory disease of the endometrium, usually within the first two weeks after delivery. This condition is caused by bacteria that colonize the lower genital tract and ascend to the uterus, leading to infection of the endometrium, the uterine lining tissue, and can progress to more serious complications if not treated properly⁽¹¹⁾.

According to recent authors, puerperal endometritis is one of the main infectious complications of childbirth, often associated with the use of invasive procedures, such as cesarean delivery or the presence

Table 1: Assessment of Activities of Daily Living.

Maintaining a safe environment	The patient lives with her husband and children in their own safe and clean home. She relies on her partner for newborn care and household chores. During hospitalization, continuous monitoring of the infection and administration of antibiotics contributed to a favorable outcome.
Communication	Verbal and nonverbal communication remained intact. She initially expressed concern about his recovery, but throughout his hospitalization, she became more calm due to his positive response to treatment.
Breathing	The patient had no changes in her respiratory pattern and was eupneic on room air. Upon admission, she had mild tachycardia associated with the infection. After stabilization of the infection and the initiation of iron supplementation (following a secondary diagnosis of anemia), she was normal.
Food	She maintains her own feeding habits, with a balanced diet supplemented with iron and protein. She maintains adequate hydration. As for the newborn's nutrition, she continued breastfeeding, supplemented with formula milk due to reduced milk production.
Elimination	Urinary and bowel pattern maintained.
Personal hygiene and clothing	In the first hours of hospitalization, she experienced fatigue while performing hygiene procedures, requiring short breaks. As she gradually recovered, she returned to performing these tasks normally and independently. Her skin was pale (due to anemia) and her mucous membranes were hydrated. Her oral hygiene was excellent.
Body temperature control	Upon admission, the patient had a persistent fever (> 38° C), accompanied by chills and sweating. After starting intravenous antibiotic therapy, the temperature began to normalize on the second day of hospitalization, remaining afebrile on the third day.
Mobility	The patient walked on his own two feet and reported feeling fatigued, which decreased throughout his hospital stay. She was independent in this activity's.
Work and Leisure	She was on maternity leave and expressed anxiety about her recovery and adaptation to her new maternal role. During her hospitalization, she showed greater confidence in her recovery and began to consider gradually resuming leisure activities.
Expression of Sexuality	The patient is married and currently has two children. She is not currently using contraceptives; she is receiving training on preventing further pregnancies.
Sleep	On the first day of hospitalization, she experienced fragmented sleep due to discomfort and fever. As treatment progressed and her symptoms improved, she began sleeping for longer periods and feeling more rested.
Death	Not applicable.

of retention of birth products. The typical clinical picture includes fever, suprapubic pain, purulent lochia and general malaise, with early diagnosis being essential to initiate treatment with appropriate antimicrobials and avoid complications such as abscesses or sepsis^(12,13).

This condition is often caused by ascending pathogenic microorganisms, such as *Escherichia coli*, *Streptococcus* from group B and *Bacteroides spp*⁽⁶⁾. In the case described, the puerperal woman presented the classic signs of endometritis, such as fever, pelvic pain and changes in lochia, which evolved favorably after the start of antibiotic therapy.



Figure 1: Case Report Flowchart.

It is important to highlight that puerperal endometritis, if not treated effectively and quickly, can result in serious complications including uterine abscess, sepsis, formation of intrauterine adhesions, future infertility, spread of infection to other pelvic and systemic organs, and the risk of systemic inflammatory response syndrome (SIRS)⁽¹²⁾. Appropriate antibiotic treatment, such as the use of clindamycin and gentamicin, has shown efficacy in reducing mortality and morbidity associated with endometritis⁽⁷⁾. The administration of broad-spectrum antibiotics, as in this case, is essential to control the infection, prevent systemic complications, and allow the woman to recover quickly⁽⁵⁾. This therapeutic approach was effective in normalizing the patient's temperature and reducing signs of inflammation and infection, reflecting the importance of early intervention.

In addition to infectious complications, the woman who recently gave birth also developed anemia, a condition commonly associated with inflammation and blood loss postpartum. Anemia can worsen recovery and directly affect breastfeeding ability, as milk production can be impaired by reduced hemoglobin and iron levels⁽²⁾. In the case described, iron treatment was essential for correcting the anemia and restoring the patient's energy and stamina, allowing her to resume her daily activities more satisfactorily. The interaction between infection, anemia, and breastfeeding requires a multidisciplinary approach, involving medication administration, clinical progress monitoring and emotional support.

Nursing care plays a crucial role in the patient's recovery, both physically and emotionally. The Theory of Activities of Daily Living (ADL), by Nancy Roper, was used to guide the planning and implementation of nursing care, with a view to promoting the autonomy of the postpartum woman⁽⁹⁾. Patient AG initially experienced fatigue and difficulty performing daily activities due to fever and infection symptoms. However, with the stabilization of her condition and continued nursing support, she gradually regained her autonomy, demonstrating a positive impact of the application of the ADL model. This model allows care to be focused on the individual needs of the patient, providing interventions tailored to their physical and emotional condition.

Emotional support from the nursing team is also essential, especially postpartum. Anxiety is common among postpartum women, who often face the challenge of adapting to their new maternal role, compounded by the physical complications of childbirth and infection⁽²⁾. The postpartum woman in this report expressed concerns about her recovery and her ability to care for the newborn. The nursing approach, which included emotional support, clarification about the recovery process, and guidance on warning signs, was essential in reducing her anxiety and promoting greater confidence in recovery. The study by Chaim *et al* (2000) highlights the importance of ongoing guidance and psychological support during the postpartum period, especially in women facing complications such as endometritis, to reduce the emotional impact of the recovery process⁽⁵⁾.

Furthermore, health education plays a fundamental role not only in preventing complications but also in promoting long-term maternal health. Guidance on self-care, early recognition of warning signs of infection, and the importance of breastfeeding were topics covered during the hospitalization⁽³⁾.

In conclusion, postpartum nursing care should be holistic, encompassing both the physical and emotional aspects of the postpartum woman. The nursing team's role is essential to monitor the woman's clinical progress, intervene early in complications and provide emotional support during the recovery process. The combination of effective clinical interventions, such as antibiotics and condition correction associated with the emotional and educational approach contributes to the full recovery of the postpartum woman and to the promotion of a safer and more peaceful postpartum experience.

Conclusion

The postpartum period is a period of significant recovery and adaptation for women after childbirth. Although it is a natural physiological process, it is associated with complications that can affect maternal health, such as puerperal endometritis. This infection, if not treated properly, can lead to serious complica-

tions, such as sepsis and even death. Careful monitoring of the postpartum woman during this period, through well-founded nursing interventions and health education, is essential for early detection of signs of infection and prevention of complications. The use of therapeutic protocols, such as appropriate antibiotic treatment, and constant monitoring of the woman's condition are essential to ensure an uneventful recovery.

The role of nurses in monitoring postpartum women with endometritis is crucial for reducing morbidity and mortality and promoting effective recovery. Individualized care, based on each patient's specific needs, facilitates clinical improvement and contributes to the quality of life of postpartum women. By feeling supported and well-informed, they are better equipped to face the challenges of this period. Education about warning signs and the importance of postpartum follow-up are also key aspects of ensuring a safer and healthier postpartum period.

Finally, this case report reinforces the importance of an integrated and continuous approach in the care of women in the postpartum period, highlighting the vital role of nursing in the prevention, diagnosis and monitoring of complications such as puerperal endometritis.

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 collection, storage and analysis, review and
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 FC: Coordination of the study, review and
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