RIASE
REVISTA IBERO-AMERICANA DE SAÚDE E ENVELHECIMENTO
REVISTA IBERO-AMERICANA DE SALUD Y ENVEJECIMIENTO

NURSING INTERVENTION FOR POSTPARTUM WOMAN WITH POSTPARTUM HEMORRHAGE: CASE REPORT

INTERVENÇÃO DE ENFERMAGEM À PUÉRPERA COM HEMORRAGIA PÓS-PARTO: RELATO DE CASO

INTERVENCIÓN DE ENFERMERÍA PARA MUJER POSPARTO CON HEMORRAGIA POSPARTO: INFORME DE CASO

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Received/Recebido: 2025-05-20 Accepted/Aceite: 2025-11-03 Published/Publicado: 2025-11-21

DOI: http://dx.doi.org/10.60468/r.riase.2025.11(03).747.19-28

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VOL. 11 NO. 3 DECEMBER 2025

Abstract

Introduction: According to the World Health Organization, postpartum hemorrhage is one of the leading causes of maternal mortality worldwide, representing a significant challenge for obstetric practice. **Objective:** To develop a nursing care plan for women with postpartum hemorrhage, addressing the importance of healthcare team intervention in the prevention and treatment of this complication, ensuring a rapid and effective approach. **Method:** Case report of a 30-year-old patient who underwent a dystocic delivery with ventouse assistance at 38 weeks and 2 days and presented postpartum hemorrhage associated with uterine atony due to retained placental remains. The Nancy Roper Theoretical Model was used for the initial assessment. The taxonomy of the International Classification for Nursing Practice and the Nursing Interventions Classification were used to develop the nursing care plan. **Results:** Based on the data collected, 5 Nursing Diagnoses were identified: Current bleeding, Current surgical wound, Risk of infection, Risk of falling and Current wound pain. **Conclusion:** The role of nurses and the nursing team in postpartum hemorrhage is crucial to ensuring maternal safety, from early identification to intervention and prevention of serious complications.

Keywords: Childbirth; Dystocia; Postpartum Hemorrhage; Uterine Inertia.

Resumo

Introdução: Segundo a Organização Mundial de Saúde, a Hemorragia Pós-Parto é uma das principais causas de mortalidade materna em todo o mundo, representando um desafio significativo para a prática obstétrica. **Objetivo:** Desenvolver um plano de cuidados de enfermagem dirigido à mulher com a Hemorragia Pós-Parto, abordando a relevância da intervenção da equipa de saúde na prevenção e no tratamento dessa complicação, garantindo uma abordagem rápida e eficaz. **Método:** Relato de caso referente a uma utente de 30 anos, submetida a parto distócico com auxílio de ventosa às 38 semanas e 2 dias, apresentou hemorragia pós-parto associada à atonia uterina devido à retenção de restos placentários. Para a avaliação inicial, recorreu-se ao Modelo Teórico de Nancy Roper. Já na elaboração do plano de cuidados de enfermagem, utilizou-se a taxonomia da Classificação Internacional para a Prática de Enfermagem e *Nursing Interventions Classification*. **Resultados:** Com base nos dados colhidos, foram identificados 5 Diagnósticos de Enfermagem, Hemorragia atual, Ferida cirúrgica atual, Risco de infeção, Risco de queda e Dor por ferida atual. **Conclusão:** O papel do enfermeiro e da equipa de enfermagem na hemorragia pós-parto é crucial para garantir a segurança materna, desde a identificação precoce até à intervenção e prevenção de complicações graves.

Palavras-chave: Distócia; Hemorragia Pós-Parto; Inércia Uterina; Parto.

Resumen

Introducción: Según la Organización Mundial de la Salud, la hemorragia posparto es una de las principales causas de mortalidad materna a nivel mundial, lo que representa un desafío significativo para la práctica obstétrica. **Objetivo:** Desarrollar un plan de cuidados de enfermería para mujeres con hemorragia posparto, abordando la importancia de la intervención del equipo de salud en la prevención y el tratamiento de esta complicación, garantizando un abordaje rápido y eficaz. **Método:** Reporte de caso de una paciente de 30 años que tuvo un parto distócico con asistencia mediante ventosa a las 38 semanas y 2 días de gestación y presentó hemorragia posparto asociada a atonía uterina debido a la retención de restos placentarios. Se utilizó el Modelo Teórico de Nancy Roper para la evaluación inicial. La taxonomía de la Clasificación Internacional para la Práctica de Enfermería y la Clasificación de Intervenciones de Enfermería se utilizaron para desarrollar el plan de cuidados de enfermería. **Resultados:** Con base en los datos recopilados, se identificaron cinco diagnósticos de enfermería: sangrado actual, herida quirúrgica actual, riesgo de infección, riesgo de caídas y dolor actual en la herida. **Conclusión:** El papel del personal de enfermería y del equipo de enfermería en la hemorragia posparto es crucial para garantizar la seguridad materna, desde la identificación temprana hasta la intervención y la prevención de complicaciones graves.

Descritores: Distocia; Hemorragia Posparto; Inercia Uterina; Parto.

Introduction

Postpartum hemorrhage is the most common obstetric complication, affecting between 5% and 10% of births, and its incidence has been increasing in the last decade[1]. Several factors can contribute to negative scenarios, including underestimation of blood loss, delays in administering treatment, delays in the availability of blood components, the absence of action protocols, insufficient training of the team, failures in interdisciplinary communication, and poor organization. Thus, early identification of risk factors for obstetric hemorrhage is crucial for a rapid and effective response[2].

According to the WHO (2023), postpartum hemorrhage can be detected late, as healthcare professionals often resort to visual examinations to estimate the amount of blood lost, a method that tends to underestimate the actual value. Furthermore, treatments are generally administered sequentially, with intervals between each approach, which can worsen the situation if the initial interventions are ineffective[3].

Postpartum hemorrhage (PPH) is defined as blood loss exceeding 500 ml after vaginal delivery or 1000 ml after cesarean section within the first 24 hours (primary PPH) or up to 12 weeks postpartum (secondary PPH). It is one of the leading causes of maternal mortality worldwide[4].

International health authorities estimate that 14 million women suffer from postpartum hemorrhage annually, of whom 70,000 die. This equates to one death every seven and a half minutes, with the majority of these fatal cases occurring in less developed countries[3].

The causes of postpartum hemorrhage can be grouped into four categories known as the 4 Ts: Tone (uterine atony, placenta previa, and uterine inversion) — the most common cause; Trauma (vaginal laceration, uterine rupture, or surgical wound); Tissue (retention of placental remnants); and Thrombin (coagulation disorders, pre-eclampsia, and sepsis). In the patient's case, the main cause was the presence of placental remnants in the uterine cavity.

The most common signs and symptoms of postpartum hemorrhage include excessive bleeding, hypotension, tachycardia, apparent pallor, dizziness, and lightheadedness. Worsening or failure to intervene immediately in these symptoms can lead to complications such as hypovolemic shock, coagulopathy (DIC — Disseminated Intravascular Coagulation), and Sheehan's syndrome (Necrosis of the anterior pituitary gland due to severe hypotension can cause chronic hormonal insufficiency), multiple organ failure, infections or even sepsis, peripartum hysterectomy or even maternal death[5–7].

Treatment should be carried out quickly and effectively and includes uterine massage to stimulate uterine contraction and reduce bleeding, volume replacement and, if necessary, blood transfusion to maintain the patient's hemodynamic stability, continuous monitoring of necessary vital signs to ensure follow-up of the clinical picture, use of uterotonic drugs such as oxytocin and misoprostol to stimulate uterine contraction. Surgical options include postpartum curettage, arterial embolization and, in more severe cases, hysterectomy[8].

In the case of the patient under study, a postpartum curettage was necessary, a gynecological surgical procedure performed to remove placental remnants or other tissues that remain inside the uterus after childbirth. This procedure is indicated to prevent complications such as infections, hemorrhages, and alterations in uterine involution. It can be performed under general or locoregional anesthesia, using specific instruments to curette or aspirate the uterine contents[9].

Signs and symptoms that may indicate the need for postpartum curettage include persistent bleeding, severe abdominal pain, fever, chills, foul-smelling discharge, and signs of infection. Complications associated with the procedure may include intrauterine injury, endometritis, heavy bleeding, and cervical lesions[10].

Given this, the overall objective of this Case Report was to develop a nursing care plan for women with postpartum hemorrhage, addressing the relevance of the healthcare team's intervention in the prevention and treatment of this complication, ensuring a rapid and effective approach.

Method

This case report aims to describe and analyze a specific clinical situation, contributing to knowledge sharing and the improvement of professional practice. Through this work, we intend to highlight the importance of observation, decision-making, and the application of evidence-based care. Furthermore, it allows for reflection on the challenges encountered in practice and possible improvements, enriching the experience for both professionals and future studies in the health field.

The report was developed through data collection, information provided by the patient herself (in the interview), information retrieved from the clinical process through the Glintt system, and Cardex for access to her pharmacological therapy. To this end, it was fundamental to inform and clarify to the patient the purpose of the case report, its objectives and its aim, guaranteeing her right to privacy, anonymity, and confidentiality of all data collected. This ensured compliance with the six ethical principles of nursing research, which include beneficence, non-maleficence, fidelity, justice, truthfulness, and confidentiality[11]. Both verbal and written consent were obtained from the patient, guaranteeing the use of her information in the case report, always in accordance with the principles of anonymity and confidentiality. To assess the patient's instrumental functionality, Nancy Roper's Activities of Daily Living Model was used[12]. In addition, a flowchart was also used to present the case, following the Equator Network model (2019).

This report conforms to the seventh edition of the American Psychological Association's guidelines for the preparation and presentation of papers and to the current Portuguese language spelling agreement. Nancy Roper's Activities of Daily Living Model "is based on a life model that centers on the person, who is defined as an open system in constant interaction with the environment, comprising twelve activities of daily living (ADLs)"[12].

> According to the aforementioned model, a nurse must be aware of the vital individuality of each individual and that there are factors that influence their knowledge, attitudes, and conduct, such as: biological, psychological, sociocultural, environmental, and socioeconomic factors, since these are intimately related to the duration of life in the various stages of development, resulting in a continuum of dependence/independence". (Lima, 2014) in (César Fonseca, Rogério Coroado, Margarida Pissarro, 2017, pp. 97–98).

Next, the user's assessment is presented according to the selected theoretical model (Table 1).

Table 1: Assessment of Activities of Daily Living.

Life Activity	Observation/Evaluation of the patient
Maintaining a safe environment	Upon admission, the patient was admitted to a single room where ventilation, cleanliness, and hygiene were maintained, and safety conditions were ensured, such as a locked bed, raised side rails, keeping the bed level low, and a call bell within the patient's reach. During her hospitalization, the patient presented with two 18G peripheral venous accesses in her left upper limb. The insertion site was monitored with no evident signs of inflammation, and the catheter dressing remained dry, clean externally, and adherent. She presents with an episiotomy, with slight edema and no signs of bleeding. Cryotherapy and perineal hygiene care were encouraged. A 14G catheter was inserted using aseptic technique, monitored for signs of infection, and removed without incident.
Communication	During her hospitalization, no changes were observed in her memory. The woman always maintained a coherent and calm demeanor, showing no personality changes.
Breathing	The patient breathes ambient air and has no smoking or alcohol consumption habits. During hospitalization, no invasive or non-invasive ventilation was required. Their breathing pattern is regular, mixed, symmetrical, and without the use of accessory muscles.
Food: Eating and Drinking	After becoming independent, the patient eats 5 meals a day, following a general diet that they tolerate. They maintain their fluid intake, approximately half a liter of water per day.
Elimination	The woman maintains control of her sphincters. There are no changes in bowel or bladder patterns. Regarding the uterus, the patient presented with a well-contracted infraumbilical uterus, scant serous lochia, odorless and without clots. However, after delivery, the presence of placental remnants in the uterine cavity prevented adequate uterine contraction, resulting in continuous bleeding.
Personal hygiene and clothing	Personal hygiene and comfort are performed by the woman herself in the restroom.
Body temperature control	During hospitalization, the patient remained afebrile (Appendix II). Her temperature remained within normal ranges.
Mobility	The lady, after undergoing the procedure on February 19, 2025, showed no alteration in mobility or gait. Independent in performing this activity, she is able to sit and move autonomously, move with effective gait, and walk effectively on slopes. According to the Braden scale, the patient is not at risk of developing pressure ulcers.
Work and leisure	During her hospital stay, KK usually remains lying in bed in the company of her husband.
Expression of sexuality	The patient is heterosexual and has a partner, who is the father of her daughter. There is no record of sexually transmitted diseases in her medical history.
Sleep	Due to the change in her role, the woman reports that during her hospital stay she wakes up several times to breastfeed her newborn. This practice has somewhat affected her sleep quality, resulting in less restful and significantly reduced periods of rest.
Death	The patient views death as a natural process of life. They have already experienced the death of a family member, which caused them great suffering and grief.

Following the initial assessment and considering the identified care needs, a nursing care plan was developed. The main health issues were highlighted, based on the Taxonomy of the International Classification for Nursing Practice[14]. Nursing interventions were guided by the Nursing Interventions Classification[15], and outcomes were monitored according to the configurations established by the ICNP. To facilitate visualization, the information was organized schematically in a flowchart, as illustrated in Figure 1.

Figure 1: Case Report Flowchart.

Case report

This case report concerns a 30-year-old female patient, of Orthodox faith, married and currently working in a pharmacy. Obstetric index: 0010, gestational age of 38 weeks and 4 days, and blood type 0 RH positive, negative serologies and negative *streptococcus* test. She presented to the emergency room at 3:00 AM due to contractions every 7 minutes. She denied any bleeding or decreased fetal movements. Examined by the obstetrician, who confirmed the onset of labor, she was admitted as pregnant.

Upon admission, the pregnant woman was alert, oriented, and in good spirits. Vital signs were stable. She reported moderate pain. A peripheral venous catheter was inserted. Cardiotocography (CTG) was performed, showing fetal well-being and irregular contractions. The remainder of the hospitalization protocol was initiated. The patient requested an epidural; an anesthesiologist was contacted. After analgesia, spontaneous rupture of the amniotic sac occurred, releasing clear fluid.

At 11:40 AM, fully dilated, the pregnant patient was transferred to the delivery room. At 1:15 PM, she had a dystocic delivery using vacuum extraction, performed by the on-site physician, requiring an episiotomy. A female newborn was born, weighing 3020 grams, with an Apgar score of 9/10/10. Spontaneous placental delivery with thick membranes, according to the obstetrician's record. The patient was calm, conscious, oriented, and hemodynamically stable. The uterus was well contracted and infra-umbilical. Episiotomy repair was necessary, without lacerations. Vaginal bleeding was reduced. 10 IU of oxytocin was administered to prevent uterine atony.

At 2:10 PM, postpartum hemorrhage was observed due to uterine atony. Uterine massage was initiated. The remaining nursing team was asked for backup, the attending physician was called, and the obstetric emergency cart was made available.

Postpartum hemorrhage protocol initiated. A second peripheral venous catheter was inserted in the right upper limb, and blood was drawn for a complete blood count and coagulation test. The genital tract was

inspected to rule out lacerations, and the uterus was assessed to rule out the possibility of uterine inversion.

Carbetocin 0.1 mg/ml intravenously (IV), tranexamic acid 100 mg/ml IV, 4 misoprostol tablets rectally, and 20 IU of oxytocin infusion were administered, according to medical indication. After the protocol was applied, the postpartum hemorrhage reversed, the uterus remained contracted and infraumbilical. Hemodynamically, blood pressure and heart rate were: 95/55 mmHg and 75 bpm; 100/55 mmHg and 70 bpm; 98/60 mmHg and 75 bpm. Uterine contractility was monitored every 10 minutes, and warning signs were reported.

After one hour, a new episode of postpartum hemorrhage occurred, and the postpartum hemorrhage protocol was restarted, with the attending physician being called. Uterine massage was performed. IV tranexamic acid was administered, and a catheter was inserted using aseptic technique, resulting in the return of concentrated urine. The patient presented with blood pressure of 75/45 mmHg and a heart rate of 100 bpm. Blood was drawn for typing, for possible transfusion, and given the severity of the clinical picture, surgical consent was obtained. The patient was duly prepared and transferred to the Operating Room (OR) as indicated by the physician for examination of the uterine cavity.

In the operating room, a uterine cavity examination was performed under general anesthesia. A significant amount of placental remnants were expelled, requiring subsequent uterine curettage. The episiotomy was revised and repaired. Blood was drawn in the operating room because, due to a hemoglobin level of 9 g/dL, the patient received a transfusion of one unit of packed red blood cells.

Upon returning to the emergency room at 6 PM, the patient presented with vital signs of 110/64 mmHg, 93 bpm, and 36.9° C. The patient was calm, conscious, and oriented. She had two intravenous lines, one in the right upper limb and one in the left, with intravenous fluid therapy in progress. The uterus was well contracted, infraumbilical, with minimal vaginal bleeding. The episiotomy showed no signs of bleeding, the edges were joined, and there were no signs of infection. After six hours, blood was drawn for a complete blood count, with a hemoglobin level of 12.1 g/dL. Vital parameters were stable. As per medical instructions, bed rest was maintained, another blood sample was taken, and the patient was lifted and catheter removed the following day. Gradual feeding was initiated according to the service's protocol.

Results

Based on the analysis and interpretation of the data presented above, 5 nursing diagnoses (ND) were defined. Among them, the following stand out as priorities: 1. Current Hemorrhage; 2. Current Surgical Wound, considered relevant in the context of postpartum hemorrhage.

The patient's current bleeding, in this case, originated from retention of placental tissue, such as placental fragments or membranes, prevents effective uterine contraction and contributes to continuous bleeding. It is important to intervene effectively and promptly in order to avoid the potential complications that may arise from this[2,4,8,16].

The current surgical wound consists of an episiotomy repair performed to repair the episiotomy. This procedure involves an incision made in the perineum during childbirth, with the aim of restoring the anatomy and function of the affected area. This procedure involves suturing the damaged structures, usually in layers, using techniques and materials that promote good healing and minimize pain, infection, and future complications. Episiotomy should be performed with proper technique, preferably under local or regional anesthesia, respecting the principles of asepsis and considering the type and extent of the injury[17].

Resolving these diagnoses is essential, as it significantly contributes to the improvement of the others. The care plan developed for each of the nursing diagnoses is described in Tables 2 and 3.

Table 2: Care plan — Postpartum hemorrhage.

ND 1. Hemorrhage: 1. Hemorrhage: "Blood loss: Loss of a large amount of blood in a short period of time, externally or internally, associated with arterial, venous or capillary bleeding" (2010 version).
Focus: Bleeding.
Judgment: Current. According to CIPE (2010 version), "Atual" is defined as "Potentiality: Present or real".

Nursing interventions:
- Monitor for blood loss;
- Check the Pinard safety globe;
- Perform uterine massage;
- Administer uterotonics (oxytocin, misoprostol, and carbetocin);
- Administer tranexamic acid;
- Administer Ringer's lactate;
- Perform catheterization using aseptic technique;
- Monitor vital signs;
- Assess for obvious signs of hemorrhage (weakness, dizziness, pale skin, shortness of breath, and altered level of consciousness).

Expected results: Preventing and controlling postpartum hemorrhage. Hemodynamic stabilization of the patient, with blood pressure and heart rate within normal limits, reflecting a positive response to treatment. Avoiding complications arising from hemorrhage.
Results obtained: Hemorrhage improved.

Final evaluation: The results obtained were consistent with the expected results, since the postpartum hemorrhage was controlled through a curettage surgery. This intervention allowed the removal of placental remnants, contributing to uterine contraction and stopping the hemorrhage. As a consequence, there was hemodynamic stabilization of the patient, with normalization of blood pressure and heart rate, reflecting a positive response to the treatment instituted. Furthermore, performing the procedure prevented more serious complications resulting from the hemorrhage (such as hypovolemic shock and organ failure), ensuring the patient's clinical recovery.

Table 3: Care plan — Current surgical wound.

ND 2. Current surgical wound: "Wound: A cut in tissue produced by a sharp surgical instrument, creating an opening in the body or organ, producing drainage of serum and blood, which is expected to be clean, i.e., without showing any signs of infection or pus" (2010 version).
Focus: Surgical Wound
Judgment: Current. According to CIPE (2010 version), "Atual" is defined as "Potentiality: Present or real".

Nursing interventions:
- Monitor for signs of infection;
- Report signs of infection;
- Assess the wound;
- Monitor signs of blood loss;
- Provide information on perineal hygiene care.

Expected results: To prevent infection of the surgical wound and promote its healing.
Results obtained: Effective.

Final evaluation: During hospitalization, hand hygiene and cleaning were performed to prevent the risk of contamination and infections. During hospitalization, the wound showed good healing progress and no signs of inflammation. Informed about perineal hygiene care (proper hygiene after urination and defecation), the patient was able to comply specifically, contributing to recovery without complications.

Discussion

As previously mentioned, postpartum hemorrhage (PPH) is one of the major obstetric emergencies and requires a rapid and effective response to avoid serious complications such as hypovolemic shock and multiple organ failure. The case presented illustrates an example of PPH associated with uterine atony and retention of placental fragments, highlighting the importance of clinical monitoring, protocol-based approach, and multidisciplinary intervention[2,4,8,16].

On the one hand, continuous clinical surveillance is crucial for the early detection of signs of hemorrhage. Rigorous monitoring of vital signs and the amount of bleeding allows for the early identification of complications, enabling rapid and effective interventions[2,16]. On the other hand, the implementation of evidence-based protocols, such as those recommended by the World Health Organization (WHO), ensures that all professionals involved follow clear and consistent guidelines. Standardization of care reduces variability in clinical practice and improves maternal outcomes. Furthermore, the approach to postpartum hemorrhage should involve a multidisciplinary team, including obstetricians, nurses, anesthesiologists, and other specialists[18]. Collaboration between different healthcare professionals is essential for effective intervention, as each team member contributes their specific skills and knowledge, enabling more comprehensive and safer care[19].

Initially, the patient presented with dystocic labor requiring vacuum extraction and episiotomy due to the risk of multiple perineal lacerations. While these interventions ensure a safe delivery, they can increase the risk of postpartum hemorrhage, either due to the extent of tissue damage or the higher probability of complications in wound healing. Although prophylactic oxytocin was administered to prevent uterine atony, hemorrhage manifested early, requiring immediate intervention with uterine massage and activation of the postpartum hemorrhage protocol.

Uterine massage is a fundamental intervention in the approach to postpartum hemorrhage, especially in cases of uterine atony. This technique has demonstrated significant benefits in reducing hemorrhage and promoting uterine contraction. On the one hand, it helps stimulate uterine muscle contractions, promoting their toning and reducing the risk of hemorrhage. Massage can increase intramural uterine pressure, which is essential for controlling bleeding[20]. On the other hand, it can contribute to decreasing the amount of blood lost during the postpartum period. According to research, the regular practice of uterine massage is associated with a significant reduction in postpartum hemorrhage[21]. In addition to the physical benefits, uterine massage can also provide comfort and psychological support to the postpartum woman, contributing to a more positive postpartum experience. The physical interaction during the massage can help strengthen the bond between mother and baby, improving the mother's emotional state[22].

The initial response was adequate, including the administration of uterotonics (carbetocin 0.1 mg/ml IV, misoprostol 4 tablets of 0.2 mg rectally, and oxytocin 20 IU intravenously), antifibrinolytics (tranexamic acid 100 mg/ml IV), and rigorous monitoring of vital signs. However, the recurrence of hemorrhage highlighted the need for a more invasive approach, culminating in the revision of the uterine cavity in the operating room and the performance of a curettage due to the presence of placental remnants.

Postpartum curettage is an important procedure when placental remnants are present, as it can prevent significant complications such as hemorrhage, infection, and future fertility problems. Curettage is essential to remove the remnants, allowing the uterus to contract properly and minimizing the risk of bleeding[23]. Retention of placental tissue increases the risk of postpartum infections, such as endometritis. Curettage helps reduce the microbial load in the uterus, decreasing the likelihood of infections and promoting faster recovery[24]. Proper removal of placental remnants is essential to preserve a woman's reproductive health. Curettage can prevent long-term complications such as Asherman's syndrome, which can occur due to infections or scarring in the uterus[25].

A critical aspect to be discussed is the importance of early identification of risk factors for postpartum hemorrhage (PPH). Although the patient had a dystocic delivery, her obstetric history was limited (G1P1), and prenatal examinations were normal. However, the need for vacuum extraction and episiotomy may have contributed to a poor uterine response in the immediate postpartum period.

Thus, the question arises: could more intensive monitoring have prevented the hemorrhage from progressing to a second, more severe episode? The answer to this question involves multiple factors. Although intensive monitoring is essential for the early detection of signs of hemodynamic instability, postpartum hemorrhage can be unpredictable, even under rigorous monitoring. In the case under analysis, the first intervention followed established protocols, with the administration of uterotonics and antifibrinolytics, in addition to uterine massage and continuous monitoring. However, the presence of placental remnants was only identified in the second episode of PPH, which reinforces the need to consider, from an early stage, complementary examinations to rule out this possibility. For example, could performing a pelvic ultrasound earlier have facilitated the early detection of placental remnants, reducing the risk of another significant blood loss?

Another point to consider is the efficiency of the multidisciplinary team's response. The rapid mobilization of the nursing team, the attending physician, and immediate access to the obstetric emergency vehicle demonstrate an organized and effective response. However, a common challenge in these situations is the delay in the availability of blood products for transfusion, especially in hospital units with limited stock. The red blood cell concentrate transfusion was only performed after uterine examination, raising questions about the need for more dynamic protocols to expedite this process in cases of severe postpartum hemorrhage (PPH).

Finally, it is important to consider the emotional and psychological impact of postpartum hemorrhage (PPH) on the patient. Despite the clinical stability achieved after the intervention, emergency situations like this can generate anxiety, fear, and trauma in women, potentially compromising the postpartum experience and the mother-child bond. Therefore, implementing psychological support for patients experiencing serious obstetric complications would be pertinent.

This case highlights the importance of prevention, early detection, and effective response to postpartum hemorrhage (PPH). Reflecting on the management of this event allows for the improvement of clinical practices, optimization of protocols, and ensuring humane and safe care for patients.

Conclusion

Nursing intervention was crucial in managing postpartum hemorrhage, especially due to uterine atony. The presence of a well-prepared and fully equipped emergency cart is undoubtedly crucial for the immediate action of the nursing team in postpartum hemorrhage situations. Having all the necessary equipment

and medications readily available allows for a faster and more effective response, stabilizing the patient's condition more safely. Adequate team preparation, with knowledge of and rapid access to these resources, is essential to minimize complications and promote the patient's rapid recovery.

Furthermore, the service's postpartum hemorrhage (PPH) protocol is printed in the "Obstetric Emergency Training — Action Flowcharts" manual, which facilitates team action in these situations, highlighting the organization and commitment to patient safety. The service has an immediate action protocol for PPH, based on cooperation between nurses and obstetricians. While obstetricians prescribe medication as quickly as possible, the nursing team follows a structured flowchart that guides the conduct to be adopted in the event of an emergency.

The obstetric medical emergency cart is always present in the delivery room, and the equipment is checked and validated monthly. Whenever an emergency occurs, the supplies are replenished on the same day, as soon as the patient is stabilized. This cart contains a specific kit for postpartum hemorrhage, a catheterization kit, and a kit for seizures, ensuring a rapid and effective response to various obstetric emergencies.

In short, each hospital institution must adopt specific protocols adapted to its local reality. To guarantee an effective response, it is fundamental to invest in the continuous training of teams through training, simulations, and a well-structured functional organization in each unit. Only with cohesive and well-coordinated teamwork is it possible to reduce maternal and perinatal morbidity and mortality.

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Authors' contributions/Contributo das Autoras
JL: Study coordination, study design, data collection, storage and analysis, review and discussion of results.
SV: Coordination of the study, review and discussion of the results.
All authors have read and agreed with the published version of the manuscript.

Ethical Disclosures/Responsabilidades Éticas
Conflitos de Interesse: Os autores declararam não possuir conflitos de interesse.
Suporte Financeiro: O presente trabalho não foi suportado por nenhum subsídio ou bolsa.
Proveniência e Revisão por Pares: Não comissionado; revisão externa por pares.
Conflicts of Interest: The authors have no conflicts of interest to declare.
Financial Support: This work has not received any contribution, grant or scholarship.
Provenance and Peer Review: Not commissioned; externally peer reviewed.

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