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NURSING CARE FOR PATIENTS WITH THROMBOPHILIA IN PRENATAL CARE NURSING CARE FOR PATIENTS WITH THROMBOPHILIA IN PRENATAL CARE

DE SOUZA, Gabriel Carvalho[1]-UNINASSAU GABRIEL,
Andressa Maria Melgarejo[2]-UNINASSAU PEREIRA,
Jaqueline[3]-UNINASSAU CRUZ, Jessica Reco[4]
-UNINASSAU

SUMMARY
The research addressed the importance of nursing care for pregnant women with thrombophilia during prenatal care, a condition that increases the risk of thromboembolic complications for both the mother and the fetus. Thrombophilia is a hemostatic disorder characterized by an increased predisposition to thrombosis, which can be caused by hereditary or acquired factors, such as the use of hormones or medications. The general objective of the study was to describe the nursing care provided to these patients, focusing on identifying risks, clinical monitoring during pregnancy, and preventive methods. The methodology used consisted of a literature review with a quantitative approach, carried out from articles selected from scientific databases such as PubMed, Google Scholar, and Scielo. Studies that addressed the topic of thrombophilia during prenatal care, with a focus on health care and prevention of complications, were included. The results showed that adequate nursing care, which includes detailed anamnesis, continuous monitoring, and administration of medications, is essential to prevent serious complications such as deep vein thrombosis and pregnancy loss. The study also highlighted the importance of preventive measures, such as adopting a balanced diet and practicing physical activities, to reduce the risks associated with thrombophilia during pregnancy.
Keywords: Thrombophilia. Nursing. Prenatal care.

ABSTRACT
The research addressed the importance of nursing care for pregnant women with thrombophilia during prenatal care, a condition that increases the risk of thromboembolic complications for both mother and fetus. Thrombophilia is a hemostatic disorder characterized by an increased predisposition to thrombosis, which can be caused by hereditary or acquired factors, such as the use of hormones or medications. The general objective of the study was to describe the nursing care provided to these patients, focusing on risk identification, clinical monitoring during pregnancy, and preventive methods. The methodology used was a literature review with a quantitative approach, conducted based on selected articles from scientific databases such as PubMed, Google Scholar, and Scielo. Studies that addressed the topic of thrombophilia during prenatal care, focusing on health care and complication prevention, were included. The results showed that adequate nursing care, including detailed anamnesis, continuous monitoring, and medication management, is essential to prevent serious complications such as deep vein thrombosis and pregnancy loss. The study also highlighted the importance of preventive measures, such as adopting a balanced diet and engaging in physical activities, to reduce the risks associated with thrombophilia during pregnancy.

Keywords: Thrombophilia. Nursing. Prenatal.

1. INTRODUCTION

Nursing care for patients with thrombophilia during prenatal care is important to ensure the health of the mother and fetus during pregnancy. Early detection of thrombophilia is extremely important. gestational during prenatal care, the pathology that "puts the survival of the mother-child binomial at risk during pregnancy, and can lead to maternal-fetal death" (Biage *et al.,*2023).

Thrombophilias are hemostatic disorders where there is an increase in prothrombotic factors, which can result in venous or arterial thrombosis. It affects approximately 15% of the Caucasian population, who are predisposed to thrombosis. It is considered a multifactorial disease, that is, it depends on several genetic and environmental factors for it to manifest itself, among these factors it is possible to mention obesity, smoking, air travel, use of hormones and/or medications, immobilization, among others. Thrombophilia can be classified as hereditary or acquired, with the former being determined by genetic predisposition.

to the occurrence of thrombosis; the second occurs as a consequence of other clinical manifestations, such as neoplasia, use of medications (Silveira *et al.,*2023).

Thrombophilia is known to have a high propensity for consistent blood clotting, characterized by venous thrombotic events. In this case, women with thrombophilia have a greater chance of developing complications during pregnancy, since women during pregnancy already have greater hypercoagulation. Several factors can be associated and contribute to the development of VTE during pregnancy. Venous stasis, which due to increased distensibility and venous capacitance, demonstrable in the first trimester (with consequent reduction in venous flow velocity in the lower limbs), or due to compression of the inferior vena cava and the left iliac vein by the pregnant uterus, is probably the main pathophysiological substrate. Increased levels of fibrinogen and other coagulation factors, especially II, VII, and X, and decreased levels of their natural inhibitors (antithrombin III, protein C and S), as well as reduced fibrinolytic activity during pregnancy, produce a relative state of hypercoagulability (Silva, 2022).

Thrombophilia is described as a hemostatic disorder that causes thromboembolic effects, and is called Acquired Thrombophilia and Hereditary Thrombophilia. Hereditary Thrombophilia generally occurs due to changes in physiological inhibitors of the coagulation system such as Factor V Leiden, antithrombin III and protein C and S deficiencies. Acquired Thrombophilia occurs due to a clinical condition, such as the use of medications (heparins and oral contraceptives), Neoplasms and Antiphospholipid Antibody Syndrome (APAS) (Rocha *et al.,*2023).

Deep vein thrombosis (DVT) of the lower limbs accounts for 75 to 80% of VTE episodes during pregnancy. Approximately two-thirds of DVTs occur in the period before birth and are equally distributed throughout the three trimesters. However, 43 to 60% of PE episodes occur in the first 6 weeks of the postpartum period. In pregnant women, DVTs are even more prevalent in the left lower limb (90% versus 55%) and in the ileofemoral segment (72% versus 9%), when compared to non-pregnant women. This fact can be explained by the accentuation of the compression of the left common iliac vein by the right common iliac artery against the fifth lumbar vertebra, caused by the gravid uterus. Based on the above, it is imperative to remember that thrombophilias are hereditary or acquired conditions capable of increasing the risk of venous or arterial thrombosis. Among acquired thrombophilia, APS (Antiphospholipid Antibody Syndrome) stands out, which is characterized by a state of hypercoagulability mediated by thrombogenic autoantibodies, which trigger venous and arterial thromboembolic events and recurrent fetal losses, such as recurrent spontaneous abortion (RSA), stillbirth (ST), fetal growth restriction (FGR), severe and early forms of severe preeclampsia (PEG), prematurity and premature placental abruption (PPD) (Gomes *et al.,*2022).

Thrombophilia is defined as a predisposition to thrombosis, being a pathology that is associated with an increase in venous or arterial thromboembolism, which contributes to more than half of thromboembolic cases during pregnancy, being characterized by generating changes and alterations in blood coagulation, conditioning a greater risk for thrombosis (Rocha *et al.,*2023). Within this perspective, this research aims to answer the following question: How does thrombophilia affect nursing care during prenatal care?

The general objective of the study was to describe nursing care for pregnant women with thrombophilia. To this end, the specific objectives were to identify the main risks of thrombophilia during pregnancy during prenatal care, address nursing care for thrombosis during pregnancy, and highlight prophylactic health methods for pregnant women with thrombosis.

2. MATERIAL AND METHOD

The research was carried out based on the literature, in studies that addressed the theme “Prenatal and thrombophilia”. The sample was composed of studies selected by the inclusion and exclusion criteria, meeting the research objective. They were selected from research platforms that met the requirements for formulating the project. The quality of the sample was able to determine a better representation of the population. To this end, factors related to the sample size and the methodology used to obtain it were taken into account (Sargi *et al.,*2024).

The inclusion criteria were: articles presented in Portuguese, published in full, with a theme and focus on prenatal thrombophilia, and field research, descriptive, epidemiological, cross-sectional and randomized studies.

Exclusion criteria included: review articles, duplicate articles and abstracts, articles on

thrombophilia that did not meet the thrombophilia requirement in prenatal care, and texts that did not present themes in full for studies and conclusions.

The study was a quantitative literature review. Data collection was carried out through the platforms of Portal Periódico, PubMed, Scielo and other platforms that presented documents in the form of articles consistent with the theme presented in this project. After the exclusion of 52 articles, 22 articles were located and separated for analysis. To this end, the descriptors used to delimit the study were: thrombophilia in prenatal care, diagnosis, treatment, prevention and care, in addition to themes focused on the most appropriate eating habits for pregnant women in the prenatal period.

3. RESULTS AND DISCUSSION

3.1 What is thrombophilia?

Thrombophilia can occur due to mutations or deficiencies in the factors that are part of the coagulation cascade, increasing the patient's risk of developing a thromboembolic disease. These alterations can be hereditary or acquired. It is known that the combined inheritance of genetic factors associated with thrombophilia results in an amplification of the risk of a thrombotic episode. In the general population, thrombophilias are rare compared with the more traditional risk factors for venous thromboembolism (VTE), including cancer, immobility, postoperative and obesity. Factor V Leiden is the result of a mutation in the factor V gene, in one of the protein C cleavage sites. Activated protein C inhibits coagulation by cleavage and inactivation of coagulation factors. Resistance to this protein results in a state of hypercoagulability. Patients who are heterozygous for Factor V Leiden have a slightly increased risk (5 to 10 times greater than individuals without the mutation) for the appearance of venous thrombosis, while homozygous individuals have an even higher risk (50 to 100 times greater) (Rocha *et al.,* 2023).

Thrombophilia is defined as a disorder of hemostasis in which there is a tendency for thrombosis to occur in veins or arteries due to abnormalities in blood composition, blood flow, or vascular wall. Thrombophilia is an event that affects women who are at risk for developing thrombolytic events. Thrombophilia is a common complex disease in which multiple risk factors, both acquired and genetic, are involved in the development of the disease. Many acquired risk factors have been identified, such as surgery, immobilization, trauma, use of oral contraceptives or hormone replacement therapy, pregnancy, malignancy, and advanced age (Gualberto *et al.,* 2023).

Gestational thrombophilia should be investigated through clinical observations, previous thromboembolic events, obstetric history, family history and causal factor of thrombophilia. There are two types of thrombophilia: hereditary, all conditions that increase the chances of thrombosis; acquired thrombophilia; when there is some genetic hereditary factor, the risks increase, and this thrombophilia should be investigated and treated because if there is an increase in fetal and maternal loss during pregnancy and detachment of previously inserted placenta, it is characterized by a hemostatic disorder that promotes thromboembolic phenomena. They are called acquired thrombophilia (AT) and hereditary thrombophilia (HT). Hereditary thrombophilia (HT) is generally due to changes involving physiological inhibitors of coagulation such as deficiencies of protein S (plasma glycoprotein), protein C (reactive), Factor V Leiden, antithrombin and mutation of the prothrombin gene. The acquired form is the result of a clinical condition factor, such as neoplasia and/or antiphospholipid antibody syndrome (APS), or the use of medications such as oral contraceptives (Silva *et al.,* 2022).

3.2 Risks of thrombophilia for pregnant women

Thrombophilia in pregnant women is a challenge that must be overcome by the mother and her child, together with the professionals involved. During pregnancy, there is a 6 to 10 times greater risk of thrombophilia than in non-pregnant women, which is greater during the puerperium. Before deciding whether or not to start VTE therapy or prophylaxis during pregnancy, it is essential to stratify the risk. There are several drugs that can be administered; however, most cross the placenta and pose a risk of embryopathy, as well as fetal and placental hemorrhages. Heparin does not cross the placenta and offers greater fetal safety. However, its variable bioavailability and difficult monitoring increase the risk of maternal thrombosis. On the other hand, the subcutaneous route makes adherence to treatment difficult (Silva, 2021).

Thrombophilia is a condition that can be hereditary or acquired resulting from alterations.

coagulation or fibrinolysis, which, however, leads to a prothrombotic condition. Thus, the hereditary condition is characterized by a predisposition to vascular occlusion due to insufficient inhibition of the coagulation cascade due to functional loss or increased coagulant activity. However, the acquired condition behaves differently, and is a consequence of another condition, such as the use of hormone replacement therapy or contraceptives, which ultimately impacts pregnancy (Castro *et al.,* 2023).

Thrombophilia is the tendency to develop thrombosis due to several physiological factors that undergo alteration and end up causing this pathology. These factors can be hereditary, such as genetic problems in relation to the production of protein C, S, antithrombin, prothrombin and factor V Leiden; or acquired through obesity, smoking, pregnancy, long plane trips, hormonal changes, cancer, surgeries and long periods in bed (Silva *et al.,* 2021).

3.3 Nursing care

Anamnesis, family history, obstetric history must be carried out, paying attention to risk factors, transcribing to the patient's medical record during prenatal care and providing appropriate nursing guidance.

> "directed by the nurse during the prenatal period, since this is the professional who will act in the direction of the anamnesis and physical examination, in order to evaluate the client who has the potential to develop DVT. In general, the treatment consists of the administration of prescribed drugs, evaluation of vital signs, symptoms and possible adverse reactions." (Santos *et al.,* 2021, p. 113-138).

Nursing is defined as the care provided, independently or collaboratively, to individuals of all ages, families, groups and communities – sick or healthy – in any setting. Nursing encompasses the promotion of health, the prevention of disease and the care of the sick, disabled and dying. Other essential roles for nurses include advocacy, the promotion of a healthy environment, research, participation in the development of health policies and management of health systems and patients, as well as 'education' (Correia *et al.,* 2022).

Thrombophilia during pregnancy represents a significant risk factor for both the mother's and fetus' health. It is essential that pregnant women with thrombophilia receive adequate monitoring, as this condition is associated with serious complications, such as recurrent miscarriages, preeclampsia, and premature birth. Perez et al. (2024) highlight the importance of nursing care for the monitoring and effective management of thrombophilia in pregnant women, emphasizing that nursing plays a fundamental role in the preventive care and education of these patients.

In the context of Primary Health Care, Biage et al. (2023) reinforce the relevance of early monitoring during prenatal care, emphasizing that nurses, by working directly with patients from the beginning of pregnancy, contribute to reducing the risks associated with thrombophilia. Early identification of the condition, combined with continuous monitoring, enables the adoption of preventive measures that improve maternal and fetal prognosis. In this sense, the role of nurses goes beyond clinical monitoring, also encompassing guidance on adherence to treatment and symptom management.

Oliveira et al. (2021) point out that placental thrombophilia can result in serious complications for fetal development, and that nurses' actions are essential to prevent complications during pregnancy. The study by these authors highlights that technical knowledge about the condition is vital for conducting safe prenatal care, and that nurses must develop specific skills in detecting signs and symptoms suggestive of the condition. Therefore, care must be individualized, taking into account the clinical characteristics of each patient, with a view to ensuring maternal and fetal well-being.

It is clear that nursing care for pregnant women with thrombophilia is essential, especially in contexts where prenatal care represents the main strategy for preventing complications. The reviewed literature emphasizes the central role of nurses in planning and implementing care that aims to minimize risks to maternal and fetal health, promoting the development of continuous and personalized monitoring strategies throughout pregnancy.

3.4 Methods of preventing the health of pregnant women

It was analyzed that the prevention of venous thrombosis there is a variety of procedures that can

be applied by the nursing professional that can be used and divided as “mechanical or pharmacological that are effective and should be used according to the degree of risk of the disease” (Pietszyk, 2023).

Nurses, like other health professionals at the UBS, must, among their duties, carry out comprehensive care and health promotion actions, prevent injuries and listen to the needs of users in all their actions, providing humanized care and enabling the establishment of bonds. However, this does not always happen in the best possible way (Martins, 2023).

Since prevention is a priority in primary care, where nurses enjoy legal autonomy, the ideal is to implement actions recommended by the Ministry of Health (MS) to prevent this mortality, increase care to ensure continuity of care and identify threats to women's health. Given these considerations, the importance and need for prenatal counseling by nurses in home primary care programs is noted, as they play an extremely important role, as in addition to helping in the physical and psychological preparation of pregnant women, ensuring the most peaceful pregnancy and birth possible; adequate and careful monitoring of consultations can reveal and, in some cases, even avoid potential conflicts between the parties. The main role of nursing in care during pregnancy is to guide gestational monitoring. Nursing professionals are responsible for informing parents about the frequency of consultations, the influence of breastfeeding on the health of the mother and baby and the vaccination schedule (Lima*et al.,*2023).

An inadequate nutritional status of pregnant women, whether due to excessive or deficient consumption of essential nutrients, is highlighted in epigenetic studies that point to an increased risk of developing chronic non-communicable diseases such as cardiovascular diseases, diabetes, obesity, and neonatal death. Nutrition can be seen as a positive factor in preventing morbidity and mortality in pregnant women, with improved maternal and child health outcomes. A balanced diet contributes to controlling weight gain during pregnancy, preventing problems such as gestational diabetes and high blood pressure, which can affect both the pregnant woman and the baby. Maintaining a healthy weight during pregnancy is crucial to minimize the risks associated with obstetric complications such as premature birth and low birth weight (Oliveira, 2024).

FINAL CONSIDERATIONS

The research aimed to describe nursing care for pregnant women with thrombophilia, a condition that involves high risks for both the mother and the fetus. Using a literature review approach, the study sought to identify the main risks associated with thrombophilia during prenatal care, as well as discuss the most appropriate nursing care and prophylactic methods that ensure maternal and fetal health. Thrombophilia was identified as a relevant risk factor that increases the predisposition to thromboembolic events, both venous and arterial, especially during pregnancy, when serious complications may occur, such as deep vein thrombosis, antiphospholipid antibody syndrome, premature placental abruption and fetal growth restriction.

The role of nursing has proven to be central to the prevention and appropriate management of thrombophilia throughout the prenatal period. Based on a careful history, nurses are able to identify risk factors and monitor possible complications, ensuring continuous and safe monitoring. In addition, the correct administration of anticoagulant medications, clinical monitoring and guidance to pregnant women on the necessary care are essential to reduce the risk of thromboembolic events. Regular monitoring throughout pregnancy is also essential to ensure that possible complications are detected early.

The research also highlighted the importance of prophylactic measures aimed at the general health of pregnant women, such as a balanced diet and regular physical activity. Adequate nutritional care is essential fundamental to prevent conditions such as gestational diabetes and hypertension, which can aggravate the condition clinical care of women with thrombophilia. The preventive and educational approach in nursing care is, therefore, essential to minimize risks and promote the health of pregnant women.

With this, the research contributes significantly to the understanding of nursing care. necessary for pregnant women with thrombophilia, offering guidance that can improve the practices of health professionals. The study reaffirms the importance of comprehensive and humanized care in prenatal care, highlighting the central role of nursing in preventing complications and promoting maternal and child health. - fetal.

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