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IMPLEMENTATION OF THE REFERENCE CENTER FOR GESTATIONAL TROPHOBLASTIC DISEASE IN MARANHÃO: EXPERIENCE REPORT[1]

Rafael Gomes da Silva*
Ivete Furtado Ribeiro Caldas**
Mariana de Sousa Ribeiro de Carvalho***
Marcos Aurélio Araújo Freitas****
Anderson Bentes de Lima*****

ABSTRACT

Objective: To present the experience of implementing the Gestational Trophoblastic Disease Reference Center in the Southwest region of Maranhão. **Method**: This is a descriptive-observational, qualitative study of the experience report type. The implementation included meetings with health managers and hospital teams to assess the feasibility of a specialized center in the region. The actions were guided by guidelines from the Ministry of Health and the Brazilian Federation of Gynecology and Obstetrics Associations. Patients diagnosed with gestational trophoblastic disease in the region were included, and those undergoing advanced treatment in other centers were excluded. **Results**: Since 2022, the outpatient clinic has treated 35 patients, two of which were referred to the Hospital São Rafael, an oncology reference center in the southwest region of Maranhão. The creation of the center solved challenges such as the lack of protocols and waiting lists, ensuring accurate diagnosis, monitoring based on best practices, and prevention of serious complications. **Conclusion**: The Reference Center for Gestational Trophoblastic Disease in Southwest Maranhão has served to optimize specialized care to women's health through updated protocols, ensuring timely care, accurate diagnosis, and adequate monitoring, contributing to the promotion, protection, and recovery of the health of the patients served.

Palavras-chave: Gynecology. Comprehensive Health Care. Pregnancy, High-Risk. Hydatidiform Mole. Gestational Trophoblastic Disease.

INTRODUCTION

Gestational trophoblastic disease (GTD) encompasses a heterogeneous group of atypical cell proliferations originating from the placental trophoblastic epithelium with benign clinical presentations represented by complete hydatidiform mole (CHM) and partial hydatidiform mole (PHM). However, it can present in malignant forms, such as invasive mole, choriocarcinoma, placental site trophoblastic tumor, and epithelioid trophoblastic tumor, grouped under the gestational trophoblastic neoplasia (GTN) collective term.[1,2]

The current incidence rate of GTD in Brazil is 1:200-400, representing a worrying condition for maternal health, especially if categorized as having a malignant clinical presentation. When not treated in reference centers, this disease has high morbidity and mortality, especially in advanced cases. The ideal management of rare diseases, such as GTD, requires centralized care to ensure consistent therapeutic decisions. Centralization involves everything from hCG monitoring with therapeutic guidance, to complete patient referral, requiring multidisciplinary teams, clear guidelines, databases, support from international societies, and ongoing funding to maintain the structure and promote better outcomes.[3-5]

In view of this, the appropriate treatment of GTD will depend on histological, clinical, and surgical criteria. Depending on the type of GTD, different approaches may be adopted or disregarded. Surgical treatment, consisting of the removal of the hydatidiform mole, leads to the cure in the vast majority of women affected by this condition. However, chemotherapy (CT) may

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**Physician. Specialist in Gynecology and Obstetrics. Adjunct Professor. UEMASUL. E-mail: rafaelgomesgo@gmail.com. ORCID: https://orcid.org/0009-0002-9844-5835.
***Physiotherapist. PhD in Neurosciences and Cellular Biology. Adjunct Professor. UEPA. E-mail: ivetecaldas@uepa.br. ORCID: https://orcid.org/0000-0002-2095-101X.
****Physician. Specialist in Gynecology and Obstetrics. PhD in Health Sciences. E-mail: marimaricarvalho@gmail.com. ORCID: https://orcid.org/0000-0002-6679-5016.
*****University student. Medical undergraduate. E-mail: marcosfreitas.20200005210@uemasul.edu.br. ORCID: https://orcid.org/0000-0003-4031-4867.
******Pharmacist. PhD in Biotechnology. Adjunct Professor. UEPA. E-mail: andersonbentes@uepa.br. ORCID: https://orcid.org/0000-0002-0534-2654.

be necessary in 20% of cases, achieving a cure and improving the prognosis for this disease.[5]

The morbidity and mortality resulting from this disease tend to decrease when the patient is treated and monitored in specialized reference centers.[4] Thus, there is a tendency for other services around the world to refer patients with hydatidiform mole to reference centers, where the infrastructure and multidisciplinary team are available for efficient treatment and follow-up. This has also been confirmed by experiences in large centers, such as Mount Sinai Hospital and Princess Margaret Cancer Center, both in the United States.[6]

Despite advances in awareness about the importance of implementing these reference centers, this is not the reality in many Brazilian municipalities, especially in regions with greater social inequalities. Studies show that when patients with GTD in general, and specifically those who have progressed to trophoblastic neoplasia, are treated outside of the Reference Centers, the risk of death or uterine mutilation increases by ten times.[7]

In addition, as post-molar follow-up is extremely important in the treatment of these patients, ensuring adherence to hormonal monitoring of the βeta fraction of human chorionic gonadotropin (β-hCG) is necessary because this is a condition that defines the remission or progression of the disease to trophoblastic neoplasia. Treatment adherence becomes challenging in underdeveloped countries or those with large territorial distances, causing patients to drop out of follow-up care.[4] Only half of women with GTD attend all post-molar follow-up medical appointments, which is an aggravating factor to be considered in the management of this disease.[7]

Given the above, this study aims to report the experience of implementing a Gestational Trophoblastic Disease Reference Center (GTDRC) in a city in the Southwest of Maranhão. The idea of its implementation arose to emphasize the importance of specialized care and optimization of the flow of care for patients with GTD. The application of clear, evidence-based guidelines as those published by organizations such as the Ministry of Health and the Brazilian Federation of Gynecology and Obstetrics Associations - FEBRASGO can help in the appropriate management of this disease, even influencing the correct indication of surgical treatments.[8,9]

METHOD

This is a descriptive-observational, qualitative study of the experience report type. The inclusion criteria comprised patients diagnosed with GTD treated in the Southwest region of Maranhão. Those who were not residents of the region or already undergoing advanced oncological treatment in other centers were excluded. The activities were guided by the methodological framework based on the guidelines of the Ministry of Health and the Brazilian Federation of Gynecology and Obstetrics Associations aimed at structuring reference services for the management of GTD.

This study arose from the work and efforts of the gynecologist and obstetrician to implement a reference center that would regulate the flow of care for pregnant women affected by GTD in the city of Imperatriz.

The GTDRC was implemented in June 2022. For the presentation of data in this article, patients with GTD were monitored from June 2022 to June 2024. The following steps were taken: I. Identification of service needs; II. Planning with other government and institutional bodies to implement the unit; III. Enabling of physical, institutional, and material conditions; IV. Sizing of the reference team.

Initially, a meeting was held between the State Health Department of Maranhão and representatives of the Ministry of Health and the Clinical Management of the Maternity Hospital regarding the follow-up flow of pregnant women with GTD in the Southwest region of Maranhão. Subsequently, another meeting between the management of the High-Risk Maternity Hospital of Imperatriz and the obstetrician-gynecologist took place to present the proposal and implement the GTDRC.

The High-Risk Maternity Hospital of Imperatriz is a public reference hospital that treats highly complex cases from 42 municipalities in the south of Maranhão and neighboring states, such as Tocantins and Pará.

As for the physical structure, the GTDRC has office 3 (Figure 1) in the outpatient sector of the

High-Risk Maternity Hospital of Imperatriz with an area of 14m^2. The multidisciplinary team is composed of: one obstetrician-gynecologist, one resident physician in gynecology and obstetrics, one infectious disease specialist, one endocrinologist, one pathologist, one physiotherapist, one nutritionist, one nurse, two nursing technicians, one social worker, one psychologist, two receptionists, one ultrasound technician, and laboratory professionals.

Figure 1. Physical structure of the Gestational Trophoblastic Disease Reference Center (GTDRC)

The available material resources are: scales, stretcher, table, chairs, glucometer, fetal heart detector, cardiotocograph, ultrasound machine, sphygmomanometer and stethoscope.

Patients diagnosed with GTD at all levels of healthcare are referred and embraced at the reception of the GTDRC at the High-Risk Maternity Hospital of Imperatriz. The nursing service performs screening, records the vital signs, and refers the patient for consultation with a physician specialized in Gynecology and Obstetrics.

The physician, in turn, performs the anamnesis and physical examination, records the results of the laboratory (especially β-hCG levels) and imaging tests, the date of the manual intrauterine aspiration, the result of the histopathological analysis, prescribes and provides guidance on contraceptive methods, clarifies doubts and determines the interval between consultations according to the protocol of the Ministry of Health and the Brazilian Federation of Gynecology and Obstetrics Associations. Finally, new exams for follow-up are requested and referrals are made depending on the clinical condition of the patient (psychology, social assistance, nutrition, physiotherapy, endocrinology, ultrasound, infectology).

This experience report was not registered in the Research Ethics Committee/National Research Ethics Commission (CEP/CONEP) system due to the exemption provided for in CNS Resolution Number 510 of 2016, art. 1, item VII.

RESULTS AND DISCUSSION

The implementation of the outpatient clinic has ensured specialized and agile care for patients with GTD, contributing to health promotion and the prevention of serious complications. The complexities of the Unified Health System (SUS), such as long waiting lines, delays in scheduling appointments and exams, as well as difficulties in returning for care are also taken into account. Therefore, the GTDRC aimed to improve the flow of care and decision-making, in addition to reducing the risk of iatrogenesis, providing an efficient care environment without waiting lines.

Before the creation of the GTDRC, the municipality lacked an organized flowchart following the guidelines of the Ministry of Health, which directly affected the well-being of patients. Based on this context of institutional disorganization, patients with GTD faced difficulties in obtaining adequate diagnosis and treatment in the regional health system, as there was confusion at the levels of public healthcare regarding the actions to be taken, where referrals should be made to and how to perform follow-up treatment of patients diagnosed with GTD.

This situation was made worse because, in many cases, patients only received uterine evacuation treatments without an accurate

diagnosis, and were wrongly treated as cases of hydropic abortion that ended up evolving into trophoblastic neoplasia, wasting valuable time in the correct and rapid implementation of the treatment, resulting in irreversible physical and psychological consequences, and sometimes leading to death.

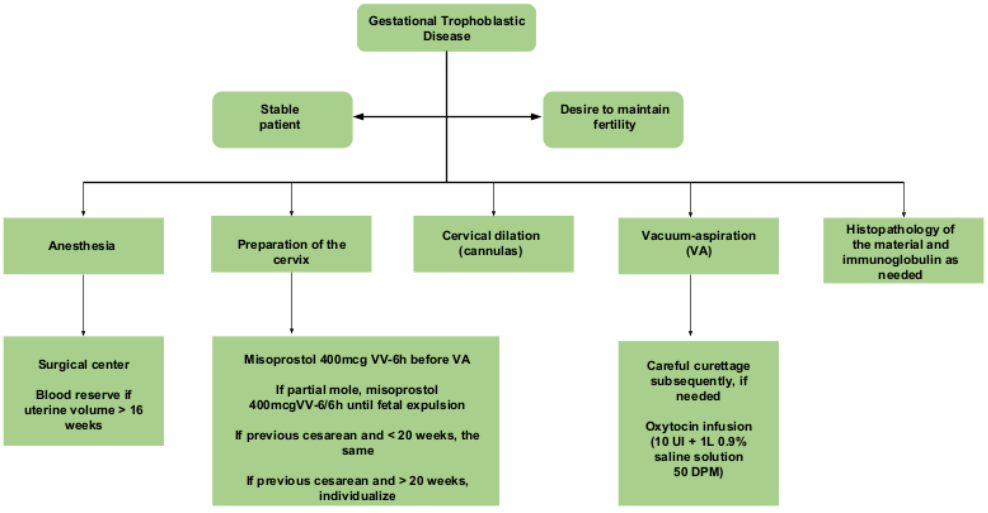
In turn, inadequate surgical treatment such as hysterectomies, when poorly indicated to treat GTD, especially hydatidiform mole, can cause serious and long-lasting consequences for patients.[2,10] Hydatidiform mole is the most common form of GTD and can generally be treated by removing the anomalous tissue from the uterus through suction curettage.[11] Therefore, in this previous case, if wrongly indicated, a radical intervention can result in infertility and significant emotional trauma, compromising the patient's quality of life.

Since its inauguration in June 2022, the GTDRC has already treated 35 patients, referring two of them to the referral oncology service in the Southwest region of Maranhão, Hospital São Rafael, in Imperatriz-MA. This management is essential in cases that require oncological treatment. A study published in the American Journal of Obstetrics and Gynecology highlighted that adequate monitoring and the use of chemotherapy, when well indicated, are possible strategies to avoid extensive surgical treatments and achieve fertility preservation in most women with GTD.[10]

The currently offered follow-up is following the practices described in the literature for the care of patients with GTN, using all the infrastructure and human resources available at the institution. After suction curettage, weekly β-hCG levels are measured until three consecutive negative weekly measurements are obtained. Then the collection interval is reduced to once a month for the next six months until the patient is safely discharged. At this time, a counter-referral to primary healthcare is made, reinforcing guidance on reproductive planning, as well as clearance if the patient wishes to become pregnant again.

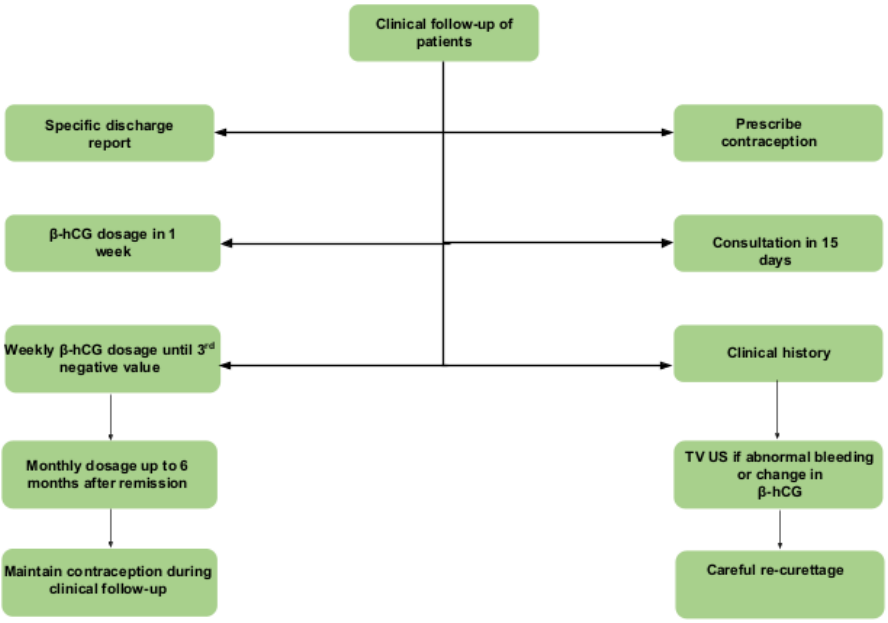
During the counter-referral, it is important to approach reproductive planning with sensitivity, considering the limiting factors and fears of patients regarding hormonal contraception. Many women have doubts or fear of adverse effects, often related to misinformation or previous negative experiences, which can impact their contraceptive choice.[12] Therefore, it is essential that primary care professionals are trained to clarify doubts, offer personalized options, and build a relationship of trust, promoting informed and safe decisions about the use of contraceptive methods. This approach strengthens comprehensive reproductive healthcare, contributing to treatment adherence and patient well-being.

The clinical and surgical conduct instituted at the GTDRC after the patient is diagnosed with GTD is illustrated in flowchart 1, which is an adaptation of a protocol already established at a public health institution in the state of Ceará.[13] This flowchart guides the development of case follow-up.



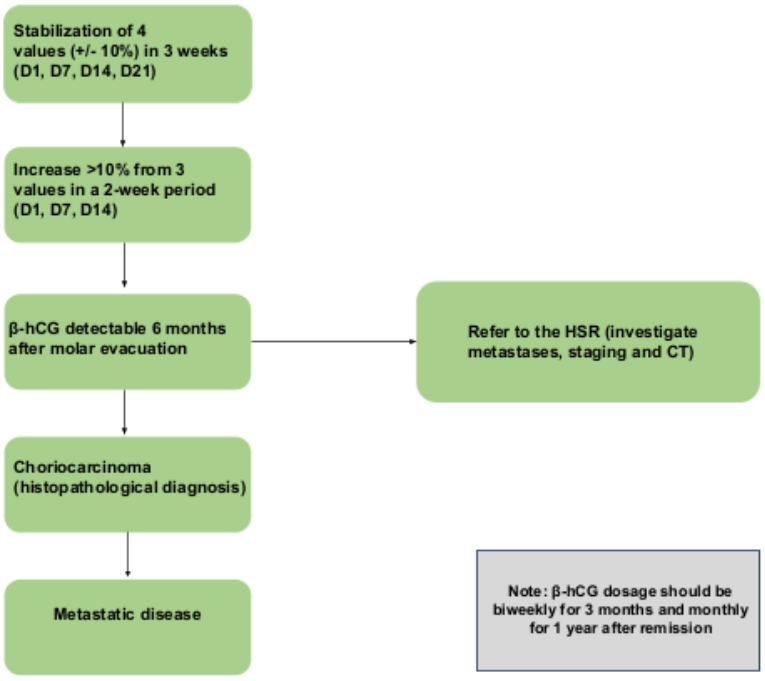
Flowchart 1. Management of GTD cases.

The follow-up of GTD cases at the GTDRC, as illustrated in flowchart 2, depends on and is composed of a series of factors, including the patient's own understanding of the clinical picture and the importance of maintaining regular follow-up and treatment; serial assessments of serum β-hCG levels; and the desire to have new pregnancies.



Flowchart 2. Follow-up in cases of GTD. US: ultrasound. TV: transvaginal.

Note that GTD follow-up will also depend on the histological type, since cases of GTN, which represent a higher-risk malignancy, require different clinical, surgical, and even chemotherapy approaches. The conduct established in the GTDRC for GTN follow-up is represented in flowchart 3.



Flowchart 3: follow-up in cases of GTN. HSR: Hospital São Rafael; CT: chemotherapy.

However, it is essential to highlight that, despite the implementation of the GTDRC and compliance with the protocols established by the Ministry of Health and the Brazilian Federation of Gynecology and Obstetrics Associations with a focus on improving the quality of care, the objective of this study was not to perform a comparative quantitative analysis on the follow-up time of patients before and after the start of the outpatient clinic.

FINAL CONSIDERATIONS

The Trophoblastic Disease Reference Center in the Southwest of Maranhão has contributed to the optimization of specialized care for women's health. Its operation is based on the protocols recommended by the Ministry of Health and the Brazilian Federation of Gynecology and Obstetrics Associations. The use of flowcharts ensures systematized care, which supports patients and professionals in managing time with timely care, accurate diagnosis, and adequate monitoring, contributing to the promotion, protection, and recovery of health.

IMPLEMENTAÇÃO DO CENTRO DE REFERÊNCIA PARA DOENÇA TROFOBLÁSTICA GESTACIONAL NO MARANHÃO: RELATO DE EXPERIÊNCIA

RESUMO

Objetivo: Apresentar a experiência da implementação do Centro de Referência em Doença Trofoblástica Gestacional no Sudoeste do Maranhão. **Método**: Trata-se de um estudo descritivo-observacional com enfoque qualitativo do tipo relato de experiência. A implementação incluiu reuniões com gestores de saúde e equipes hospitalares para avaliar a viabilidade de um centro especializado na região. As ações foram orientadas por diretrizes do Ministério da Saúde e da Federação Brasileira das Associações de Ginecologia e Obstetrícia. Foram incluídas pacientes diagnosticadas com doença trofoblástica gestacional, na região, e excluídas aquelas em tratamento avançado em outros centros. **Resultados**: Desde 2022, o ambulatório atendeu 35 pacientes, com duas encaminhadas ao Hospital São Rafael, centro de referência oncológica, na região sudoeste maranhense. A criação do centro solucionou desafios como a falta de protocolos e filas de espera, garantindo diagnóstico preciso, acompanhamento baseado em melhores práticas e prevenção de complicações graves. **Conclusão**: O Centro de Referência em Doença Trofoblástica Gestacional, no Sudoeste do Maranhão, tem servido para a otimização da assistência especializada à saúde da mulher, através de protocolos atualizados, garantindo um atendimento oportuno, diagnóstico preciso e monitoramento adequado, contribuindo para promoção, proteção e recuperação da saúde das pacientes acolhidas.

Palavras-chave: Ginecologia. Assistência Integral à Saúde. Gravidez de alto risco. Mola Hidatiforme. Doença Trofoblástica Gestacional.

IMPLEMENTACIÓN DEL CENTRO DE REFERENCIA PARA ENFERMEDAD TROFOBLÁSTICA GESTACIONAL EN MARANHÃO: RELATO DE EXPERIENCIA

RESUMEN

Objetivo: presentar la experiencia de implementación del Centro de Referencia en Enfermedad Trofoblástica Gestacional en el Sudoeste de Maranhão-Brasil. **Método**: se trata de un estudio descriptivo-observacional con enfoque cualitativo del tipo relato de experiencia. La implementación incluyó reuniones con gestores de salud y equipos hospitalarios para evaluar la viabilidad de un centro especializado en la región. Las acciones fueron orientadas por directrices del Ministerio de Salud y la Federación Brasileña de Asociaciones de Ginecología y Obstetricia. Se incluyeron pacientes diagnosticadas con enfermedad trofoblástica gestacional en la región, y se excluyeron a aquellas en tratamiento avanzado en otros centros. **Resultados**: desde 2022, el ambulatorio atendió a 35 pacientes, con dos dirigidas al Hospital São Rafael, centro de referencia oncológica, en la región suroeste de Maranhão-Brasil. La creación del centro resolvió desafíos como la falta de protocolos y las colas de espera, asegurando diagnósticos precisos, supervisión basada en las mejores prácticas y prevención de complicaciones graves. **Conclusión**: el Centro de Referencia en Enfermedad Trofoblástica Gestacional, en el Sudoeste de Maranhão-Brasil, ha servido para la optimización de la asistencia especializada a la salud de la mujer, a través de protocolos actualizados, garantizando una atención apropiada, un diagnóstico preciso y monitoreo adecuado, contribuyendo a la promoción, protección y recuperación de la salud de las pacientes acogidas.

Palabras clave: Ginecología. Atención Integral en Salud. Embarazo de alto riesgo. Mola Hidatiforme. Enfermedad Trofoblástica Gestacional.

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Endereço para correspondencia: Rafael Gomes da Silva. Rua Tiradentes, 41, Centro, Augustinopólis, TO, Brasil, 77960-000. E-mail: rafaelgomesgo@gmail.com

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