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Journal of Obstetrics Gynecology and Reproductive Sciences
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Short Communication

Schistosomiosis and Pregnancy

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Received date: September 08, 2025; Accepted date: September 19, 2025; Published date: October 03, 2025.

Citation: Gilberto Bastidas, Peña M, Báez M, Daniel Bastidas, Geraldine Bastidas-Delgado, (2025 Schistosomiosis and Pregnancy, *J. Obstetrics Gynecology and Reproductive Sciences*, 9(7) **DOI:10.31579/2578-8965/283**

Abstract:

In tropical and subtropical regions, schistosomiasis is a common parasitic disease that can have serious consequences for maternal and fetal health. This is marked by underreporting and limited research. Therefore, the objective of this paper is to accurately demonstrate, without sacrificing crucial details, what has been done in this area, with the firm goal of stimulating the study of this particular helminthiasis, and later, although it may seem utopian, achieving its control and eradication. From the literature reviewed, it is clear that anemia is a frequent complication of schistosomiasis in pregnant women, and that hyperinfection can trigger premature placental abruption with fetal death.

Keywords: pregnancy; strongyloides stercoralis; helminths; anemia; parasitosis.

Introduction

Helminths are distributed worldwide and cause various clinical syndromes in humans, with some affected individuals presenting no defined symptoms and others with clear and severe symptoms. Likewise, the infections they cause can be localized or disseminated. Reports of helminthiasis occur worldwide, but are more frequent in tropical and subtropical regions, or particularly in low-income populations. This article refers to the helminth Strongyloides stercoralis in pregnant women, as little is known about the maternal and fetal consequences of infection with this parasite, compared to unicellular and other multicellular parasites [1-6].

There is clear evidence that parasitic infections other than S. stercoralis cause pathologies and complications in pregnancy, such as anemia, malnutrition, intrauterine growth retardation, premature delivery, and low birth weight. Pathologies and complications that are also seen in intrauterine infections, however, the role of extrauterine infection by S. stercoralis in pathologies and complications of pregnancy is less clear despite the fact that traditional risk factors and the establishment of the precise temporal relationship with the parasitic infection increase the certainty of their existence, as well as the demonstration in experimental animals that maternal schistosomiasis causes long-term defects in cellular immunity induced by parasite antigens [7-9]. In endemic areas, S. stercoralis infection can reach a seroprevalence of 12.2%, with a mortality rate between 60 and 85% in immunosuppressed patients, massive larval invasion of lungs and other tissues is described in hyperinfection that complicates cases in a proportion of 2.5% and in pregnant women the reports are limited exclusively to clinical cases, in this sense, S. stercoralis can unusually, particularly in massive infections, trigger placental abruption with subsequent premature delivery (it has been recorded in 4% of prenatal births) and intrauterine fetal death [8, 10, 11].

Another critical complication of schistosomiasis in pregnant women is anemia, according to systematic reviews and meta-analyses. This could undoubtedly have serious consequences for maternal health, despite the fact that the prevalence of S. haematobium infection in endemic areas does not exceed 4.5%. It is accepted that S. haematobium anemia is due to blood loss caused by the passage of its eggs through the urogenital tract (hemorrhage), autoimmune hemolysis, and iron deficiency. There is no conclusive evidence to support the hypothesis that schistosomiasis has adverse effects on childbirth and that it actively contributes to intrauterine growth restriction, since placental schistosomiasis (diagnosed by histology) is not sufficiently associated with adverse pregnancy outcomes [12-18]. Because schistosomiasis in pregnant women is chronic and has an insidious clinical presentation, making disease quantification difficult, and due to the lack of adequate and sufficient records in endemic countries, the generation of accurate data is recommended as the primary mechanism for establishing or improving control strategies [12-14, 16, 18, 19].

Conclusions

Schistosomiasis is a neglected parasitic infection that infrequently affects pregnant women, although underreporting is common in endemic areas. Furthermore, information on the complications it causes to fetal and maternal health is scarce, so it is recommended to expand research in the field and compile existing information separately. Placental abruption due to

hyperinfection and maternal anemia, which severely affect the fetus, are reported as complications of this helminthiasis during pregnancy.

References

1. Akers A, Vest A, Schenone C, et al. (2023). Strongyloides stercoralis Hyperinfection Syndrome in Pregnancy. Cureus. 16;15(8):e43568.
2. Bastidas G, Bastidas D, Bastidas-Delgado G. (2021). Notions about pregnancy and parasitic diseases. Obstet Gynecol Int J. 12(1):40-43.
3. Bastidas G, Bastidas D. (2023). Nutritional Disorder in Malaria Infection. Paper to be Clarified. Acta Scientific Nutritional Health. 7(11):38-39.
4. Bastidas G, Bastidas D, Bastidas-Delgado G. (2025). Anisakiasis, Accidental Helminthiasis in Humans Due to Ingestion of Seafood. Open J Med Images Case Rep. 2(2): 05-10. ISSN-No: 3067-1078.
5. Bastidas G, Bastidas D, Bastidas-Delgado G. (2025). Anisakiosis and its Role in Acute Abdomen. J Surg Case Rep Images. 8(5);
6. Bastidas G, Bastidas D, Bastidas-Delgado G. (2025). Malaria An Enemy to Fear During Pregnancy. J Surg Case Rep Images. 8(2).
7. Buresch A, Judge N, Dayal A, et al. (2015). A fatal case of strongyloidiasis in pregnancy. Obstet Gynecol. 126:87-89.
8. Cortés-Selva D, Gibbs L, Ready A, et al. (2021). Maternal schistosomiasis impairs offspring Interleukin-4 production and B cell expansion. PLoS Pathog. 17(2):e1009260.
9. Wikman-Jorgensen P, Requena-Méndez A, Llenas-García J. (2021). A review on strongyloidiasis in pregnant women. Res Rep Trop Med. 12:219-225.
10. Karanam L, Basavraj G, Papireddy C. (2021). Strongyloides stercoralis hyper infection syndrome. Indian J Surg. 83:582-586.
11. Martinez S, Mbabazi P, Sebitloane M, et al. (2024). The WHO atlas for female-genital schistosomiasis: Co-design of a practicable diagnostic guide, digital support and training. PLOS Glob Public Health. 4(3):e0002249.
12. Friedman J, Kanzaria H, McGarvey S. (2005). Human schistosomiasis and anemia: the relationship and potential mechanisms. Trends Parasitol. 21(8):386-392.
13. Salam R, Cousens S, Welch V, et al. (2019). Mass deworming for soil-transmitted helminths and schistosomiasis among pregnant women: A systematic review and individual participant data meta-analysis. Campbell Syst Rev.15(3):e1052.
14. Adam I, ALhabardi N, Al-Wutayd O, et al. (2021). Prevalence of schistosomiasis and its association with anemia among pregnant women: a systematic review and meta-analysis. Parasit Vectors. 14(1):133.
15. Murenjekwa W, Makasi R, Ntozini R, et al. (2021). Determinants of Urogenital Schistosomiasis Among Pregnant Women and its Association With Pregnancy Outcomes, Neonatal Deaths, and Child Growth. J Infect Dis. 223(8):1433-1444.
16. Cando L, Perias G, Tantengco O, et al. (2022). The Global Prevalence of Schistosoma mansoni, S. japonicum, and S. haematobium in Pregnant Women: A Systematic Review and Meta-Analysis. Trop Med Infect Dis. 7(11):354.
17. Gerstenberg J, Mishra S, Holtfreter M, et al. (2024). Human Placental Schistosomiasis-A Systematic Review of the Literature. Pathogens. 13(6):470.
18. Okoroafor C, Umeononihu O, Anikwe C, et al. (2024). Impact of schistosomiasis infection on maternal and neonatal outcomes in pregnancy: a prospective cohort study in Nigeria. BMC Pregnancy Childbirth. 24(1):864.
19. Ndiour C, Senghor B, Thiam O, et al. (2024). Prevalence and associated factors of schistosomiasis among pregnant women in northern Senegal. BMC Infect Dis. 24(1):682.

DOI:10.31579/2578-8965/283