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Commentary

Congenital toxoplasmosis: the importance of implementing clinical practice guidelines

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Women infected with *Toxoplasma gondii* during pregnancy are, in most cases, asymptomatic, but the consequences of congenital infection can be serious for the fetus. Congenital toxoplasmosis can cause miscarriage, neurological and/or ocular damage to the fetus. Despite the possible severity of the outcome, congenital toxoplasmosis is a neglected disease[1]. Most emerging studies from Latin American countries show significantly high seropositivity rates, ranging from 50.0 to 74.5%[2]. In Colombia, about 50–60% of pregnant women are seroreactive, and this parasitosis can be considered a significant public health problem[3]. In that country, the risk of exposure to *T. gondii* during pregnancy and, consequently, congenital transmission to their fetuses is high, due to the number of seronegative women of childbearing age. In addition, more aggressive strains of *T. gondii* strains are being described in Latin America, which aggravates the consequences of these cases, also including an increased risk of death[4].

In the article by Mejia-Oquendo et al.[5], published in *The Lancet Regional Health-Americas*, the authors compare changes in medical management, diagnosis, and the occurrence of congenital toxoplasmosis sequelae before and after the implementation of clinical practice guidelines in Colombia, which took place in 2013^a. Some benefits related to the publication and implementation of clinical practice guidelines, such as a reduction in severe cases of hydrancephaly, were evidenced[6]. However, there was no evaluation of its implementation in prenatal care and its impact after

the officialization of the guidelines by the Ministry of Health. Thus, Mejia-Oquendo et al.[5] point to the fact that, after the implementation of these national guidelines, it was observed that all mothers of children with congenital toxoplasmosis had an opportune diagnosis, which allowed for adequate treatment when necessary; a significant reduction in the frequency of severe forms and in the total number of cases was also observed. This evidence has also been observed by other authors previously¹, however the impacts of these guidelines had never been evaluated.

The Colombian guidelines are the first to carry out the entire process to be officially adopted by the social security system, which means that all public and private health services can follow their recommendations. The results obtained in the article by Mejia-Oquendo et al.[5] point to its importance not only for the medical community, but also for health policy makers, showing the benefits of toxoplasmosis diagnosis and treatment when followed as indicated conducts, which can prevent or reduce vision loss, as well as cognitive and motor disfunctions and, above all, save lives, reducing the suffering due to this disease[7]. The implementation of guidelines helps physicians in developing a uniform clinical approach for the diagnosis and treatment of toxoplasmosis in pregnancy, bringing direct benefits of the proper management for the pregnant woman and her baby. In addition, the study demonstrates the positive impact of implementing guidelines for congenital toxoplasmosis in Colombia based on evidence in the World since 2013.

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As in the study by Peyron et al.[8], the assessment of the guidelines took into account robustness and quality of evidence.

The results obtained in the study point to the importance of implementing guidelines in the diagnosis and control of congenital toxoplasmosis, especially in countries where the prevalence and pathogenicity of different strains of the parasite are considered high, as in Colombia. However, it is essential that these guidelines are correctly interpreted by health professionals and, especially, that they can be requested and interpreted in the prenatal period, as well as transmitted as control measures. Studies carried out around the World indicate lack of knowledge about the disease among health professionals and also among pregnant women[9,10], which can impede the implementation of any program. Therefore, from the point of view of public health, it would be necessary to assess the knowledge of these professionals, as well as whether the correct transmission of knowledge to pregnant women is able to effectively prevent *Toxoplasma gondii* infection and the development of prenatal infection.

There is still a long way to go with regard to congenital toxoplasmosis, not only in Colombia, but in many countries that the diagnosis, prevention and control of this parasitosis are not well established. However, it is possible to see that, with the implementation of the guidelines, a very important first step was taken in Colombia, because it establishes a model, standardized and technically supported conduct, which will imply the adoption of measures that will certainly save lives and will bring savings to public funds, where they are correctly implemented. Similar measures can, and should, be adopted in other countries in order to reduce the occurrence of this disease, improving the health of their populations and reducing the suffering due to this disease.

Contributors

Both the authors contributed equally to the article.

Declaration of interests

The authors declared no conflicts of interest [check statement to match COI form]

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