ORIGINAL RESEARCH

37. Risk of Recurrence of Congenital Ocular Toxoplasmosis in Children: A Meta-Analysis Review of Studies With Long-Term Clinical Follow-up.

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https://www.youtube.com/watch?v=4rJ3DHWeKRs&list=PLhqNq3xJClbafO0Y5bvBcgMmXpgzJxd44&index=6&t=9511s

Background. Congenital toxoplasmosis, a vertical infection caused by *Toxoplasma gondii,* can result in neurological and ocular sequelae that may manifest even years postnatally. Although standardized postnatal treatments have been implemented, clinical recurrences, particularly ocular ones, are anticipated to persist during extended follow-up periods. Consequently, prenatal treatment may potentially mitigate these recurrences; however, the evidence supporting this is currently limited and dispersed.

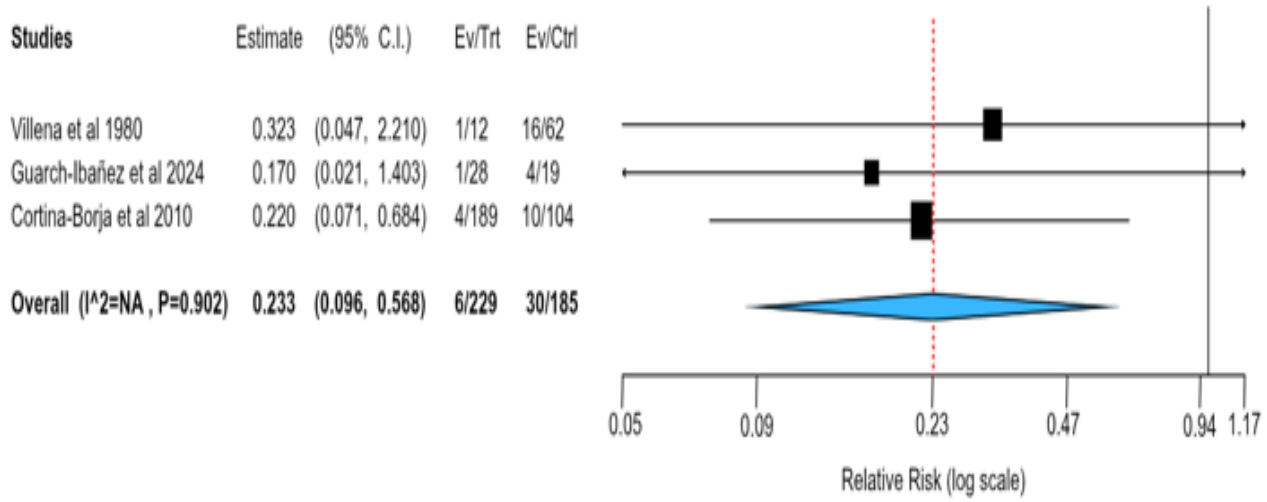
Aim: To conduct a meta-analysis on the recurrence rate in children with congenital toxoplasmosis, considering their history of prenatal and postnatal treatment (spanning at least one year), and incorporating long-term clinical follow-up (extending for a minimum of two years).

Methods. The databases utilized for the study selection process included PubMed, Web of Science, and Google Scholar. The Medical Subject Headings (MeSH) terms employed were "Toxoplasmosis AND Congenital" and "Toxoplasmosis AND Ocular." The search was refined using the filters "clinical trial" and "randomized controlled trial." Additionally, the references of the identified articles were scrutinized to identify other pertinent studies, employing the snowball technique. Experts in the field were consulted to provide relevant published or unpublished data. Studies were included if they reported a minimum of two years of follow-up and presented the results of ophthalmological follow-up. Data concerning prenatal treatment were extracted and systematically organized in an Excel database. The recurrence rate was determined by dividing the number of relapses among untreated patients over the follow-up period by 100.

Results. Following revision, only three studies documented the incidence of new retinochoroiditis episodes during extended ophthalmological follow-up. All children in these cohorts received a minimum of one year, with some receiving up to two years of postnatal anti-*Toxoplasma* treatment. The adjusted recurrence rate in prenatally treated children was 2.6 (n = 229), whereas in untreated children, it was 16.2 (n = 185). The overall adjusted risk of recurrence in prenatally treated children was 0.23 (95% CI: 0.09–0.56; p = 0.001).

Conclusions. There is a paucity of research concerning the impact of prenatal treatment on the ocular recurrence of congenital toxoplasmosis. A meta-analysis of three studies revealed that the absence of prenatal treatment heightened the risk of new episodes, even after one year of comprehensive postnatal treatment.

Figure 1. Forest Plot: Meta-Analysis of Relative Risk (Vilena, Guarch-Ibañez, and Cortina-Borja Studies).



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