

A META-ANALYSIS OF THE PREVALENCE OF TOXOPLASMA GONDII IgG ANTIBODIES IN PATIENTS WITH MENTAL DISORDERS

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Key words: Toxoplasmosis, seroprevalence, review, meta-analysis, mental disorders

OBJECTIVES AND BACKGROUND

Toxoplasma gondii infection has been recently associated with schizophrenia and other psychiatric disorders. The aim of the present study was to evaluate the prevalence of *T. gondii* infection in psychiatric patients by using meta-analytical methods.

MATERIALS AND METHODS

By systematic research of PUBMED Database, we identified several articles on this issue. We included case-control studies focused on the seroprevalence of *T. gondii* (IgG antibodies) in patients with psychiatric disorders and healthy controls, published over the past 10 years. R3.2.2. free software for statistical computing and graphics was used to perform the meta-analysis. Data were pooled using a random effects model and Mantel-Haenszel method.

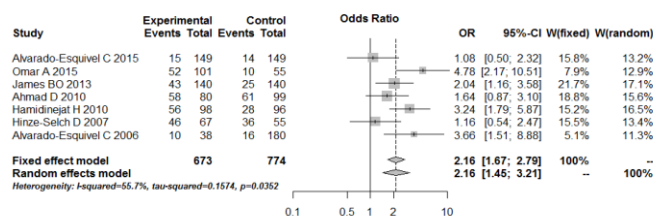
RESULTS

The PUBMED Database showed references to only seven scientific papers that investigated the prevalence of *T. gondii* IgG antibodies in psychiatric patients. Six hundred seventy three patients and seven hundred seventy four controls coped with the inclusion criteria and were used in our analysis. We found a significant increase of *T. gondii* IgG antibodies in patients with schizophrenia and other psychiatric disorders compared with controls (41.6% vs 24.54%, OR = 2.16, 95% CI = [1.45-3.21], P = .001).

CONCLUSIONS

An increased seroprevalence of *T. gondii* IgG antibodies has been reported in psychiatric patients. Our study suggests that *T. gondii* infection may be relevant in

order to determine and understand the complex etiology of schizophrenia and other psychiatric disorders.



Graphical abstract: Meta-analysis of the prevalence of *T. gondii* IgG antibodies in patients with mental disorders

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