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***Toxoplasma gondii* Immunoglobulin G Antibodies and Nonfatal Suicidal Self-Directed Violence**

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Objective: The primary aim was to relate *Toxoplasma gondii* seropositivity and serointensity to scores on the self-rated Suicide Assessment Scale (SUAS-S). Another aim was to reevaluate the previously reported positive association between *T gondii* serointensity and a history of nonfatal suicidal self-directed violence.

Method: This cross-sectional, observational study compared *T gondii* serointensity and seropositivity in plasma from 54 adult suicide attempters (inpatients at Lund University Hospital, Lund, Sweden) and 30 adult control subjects (randomly selected from the municipal population register in Lund, Sweden) recruited between 2006 and 2010. The potential of patients and controls for self-directed violence was evaluated with the SUAS-S. Psychiatric diagnoses were made according to DSM-IV criteria. Plasma samples were tested for immunoglobulin G antibodies to *T gondii*, cytomegalovirus, and herpes simplex virus type 1. Data were analyzed using multivariable logistic regression to investigate the association between *T gondii* serointensity or seropositivity and a history of nonfatal suicidal self-directed violence; multivariable linear regression was used to explore the relationship between *T gondii* serointensity or seropositivity and the SUAS-S. Both regression models included sex, age, and body mass index as covariates.

Results: Seropositivity of *T gondii* (adjusted odds ratio [OR] = 7.12; 95% CI, 1.66–30.6; $P = .008$) and serointensity of *T gondii* (adjusted OR = 2.01; 95% CI, 1.09–3.71; $P = .03$) were positively associated with a history of nonfatal suicidal self-directed violence. Seropositivity of *T gondii* was associated with higher SUAS-S scores, a relationship significant for the whole sample ($P = .026$), but not for suicide attempters only. No significant associations with other pathogens were identified.

Conclusions: These results are consistent with previous reports on the association between *T gondii* infection and nonfatal suicidal self-directed violence. Confirming these results in future large longitudinal studies and including suicide as an outcome may lead to novel individualized approaches in suicide prevention.

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