

Seroprevalence of *Toxoplasma gondii* antibodies among Atayal aboriginal people and their hunting dogs in northeastern Taiwan

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Abstract

Atayal aborigines, living at an altitude of 1,500-1,600 m in northeastern Taiwan, still hunt for wild animals with the help of hunting dogs. In this study, the latex agglutination test (LAT) was used to detect sera anti-toxoplasma antibodies in this community as a measure of their exposure to *Toxoplasma gondii*. The positive rates for sera anti-toxoplasma antibodies were 21.8% and 19.6%, respectively, in 422 Atayal and 51 hunting dogs tested. Neither of the positive rates were found to be significantly different between male (22.1%) and female Atayal (21.4%), or between humans (21.8%) and dogs (19.6%) ($P > 0.05$) when compared by the Chi-Squared test (chi 2-test). A significant difference was observed between the positive rates in adults (28.3%) and children (18.7%) ($P < 0.05$), and the age pattern of prevalence is consistent with an increasing duration of exposure to *Toxoplasma gondii* with age. The consumption of raw liver of wild animals or insufficiently cooked meat may be the major mode of transmission of toxoplasmosis in Atayal.