# Abstract

**We have so far studied the presence and distribution of Toxoplasma gondii among the 221 pregnant women and 58 new born babies from aboriginal nationalities in Nantou county, Taiwan. We focused on our attention to the occurrence of IgG and IgM immunoglobulin molecules to the parasite and the relationships between mothers and babies to understand the acute or chronic infection with the parasite. Among the pregnant women studied, 52.1% and 45.2% are Tai-ya and Bu-nong nationalities, respectively. Moreover, the majority of the pregnant women studied are at their ages of 20 to 29 years old, and 45.7% of them are in the range of 20-24 years old, suggesting their normal age distribution of pregnancy. In addition, about 78% of the pregnant women under this investigation are housewives, suggesting their particular living style. Fourthly, more than half of aboriginal pregnant women ever received good education with senior high schooling. Finally, 55.6% of them have had one to three times of pregnancy, and 32.8% of which are the 2nd pregnancy with which it is in a good relation to 34.3% of them with the first babies. There are, however, 23.9% of the pregnant women with the 4th to 8th pregnancy and normally with 3-6 babies.**

**ELISA of aboriginal women sera for specific immunoglobulin to Toxoplasma gondii showed that 40.7% are IgG positive, while the newborn babies？HHHHHH？HHHHHH sera are 39.66% IgG positive, in which five of the pregnant women had seroconversion from negative to positive. These results constructed a good relationship between the positive women and positive babies ($r=0.640$, $p<0.005$). In order to understand the acute infection with the parasite, we also tested the presence of IgM immunoglobulin from all the collected samples, and the data showed overall negative IgM is present in either pregnant women or newborn babies, suggesting that no acute infection had ever occurred among the pregnant women in our investigation sampling.**

**We would like to point out that the abortion rate among the aboriginal pregnant women is about 1.4%, and the data may not be able to indicate the overall rate since our questionnaires showed that 5.7% of the investigated women had the experience of abortion. Moreover, abortion rate does not seem to be related to the infection with the parasite, but more investigation should be carried on since the sample number of such abortion is not adequate enough.**

**We analysed questionnaire and revealed knowledge of Toxoplasma gondii infection and exposure risk factors that up to 96.3% of pregnant women never heard about Toxoplasma gondii and 31.8% of them ever consumed raw meat and 12.8% of them ate uncooked animal viscous before.**

**In conclusion, over 40% pregnant women are specific anti-Toxoplasma gondii IgG positive; over 90% of them do not have any knowledge about Toxoplasma gondii and over 30% of them had consumed raw meat, suggesting that the government may consider to exam specific anti-Toxoplasma gondii antibodies during regular pregnant check and to enhance healthy educational propagation.**



**Keywords：Toxoplasma gondii；Toxoplasmosis；Aborigines；Pregnant；Abortion；Infection**