

T. gondii serology in diagnosing HIV patients

Sir,

We read with interest the article on the utility of serodiagnostic tests in cerebral toxoplasmosis from^[1] NIMHANS, Bangalore, and were surprised with the conclusion.

Authors found the sensitivity, specificity, and positive and negative predictive values of the toxoplasma antibody in blood and lumbar and ventricular CSF as 100%. This gives colleagues the idea that we can diagnose cerebral toxoplasmosis in HIV patients with total confidence by doing serology in blood or CSF (lumbar or ventricular).^[1]

But the cases studied were peculiar. The cerebral toxoplasmosis cases were all those who died with cerebral toxoplasmosis and CSF was taken at the postmortem. It is not surprising that they were all positive. The controls were cases who had died of road traffic accidents and chosen because their sera were negative for *Toxoplasma gondii*. So there is no reason to be surprised that all were negative in CSF and serum in the control group, and all were positive in the controls. The controls were amazingly chosen because they were serologic negative for toxoplasma. In Pune, in a normal person coming to Ruby Hall, we have found the IgG T.^[2] Gondi serology was found to be positive in 63%. The authors themselves quote the serology in healthy blood donors in their area to be 11%. Using our figures, the specificity falls below 50%. Once specificity comes to 42% the test becomes worthless to make

a diagnosis. What we can say is that a negative blood IgG test excludes toxoplasmosis.

We have not done CSF toxoplasmosis IgG in normal patients with IgG positivity in serum but some at least will be mildly positive. The high titers cannot be used compared to controls because they have taken the worst cases to study and not the milder earlier cases. The toxoplasma IgG in lumbar CSF had a sensitivity of <10% in advanced cases.

The PCTR in the lumbar fluid was shown to have a sensitivity of 76%. There is no study of the specificity using normal seropositive patients.

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