HH.MED.16

Toxoplasma gondii ANTIBODY POSITIVITY AMONG PATIENTS WITH CLINICALLY SUSPECTED OCULAR TOXOPLASMOSIS

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Toxoplasma gondii is an important cause of chorioretinitis globally and is responsible for the majority of uveits. The infection is usually acquired congenitally or postnatally by ingesting food or water contaminated with oocysts shed by cats or by eating raw or undercooked meat containing tissue cysts. No studies have been carried out in Sri Lanka on ocular toxoplasmosis and the prevalence of ocular infection in humans is not known. This study was carried out to determine the *T.gondii* seropositivity among clinically suspected ocular toxoplasmosis patients and to assess the clinical manifestations amongst the seropositives.

A total of 104 (females 47 and males 57) clinically suspected ocular toxoplasmosis patients referred by eye surgeons in Kandy, Badulla, Nuwera Eliya and Nawalapitiya were studied between September 2010 and May 2012. Data on age, sex, fundoscopic findings were obtained from the referral letter. Serum samples from each patient were subjected to *T.gondii* specific IgG and IgM assays.

The median age of the patients was 34years (range 4-74 years). The *T. gondii* IgG positivity was 33.7% (35) with only one patient having both IgG and IgM. They presented with the following eye lesions: uveitis (67), vitritis (8), macular scar (8) granuloma of eye (7), retinal scar (5) endophthalmitis (4) choroiditis (3) and vasculitis (2). The majority of seropositives 26 (74%) had uveitis. Of these, 15 had pan uveitis, 8 had posterior uveitis and 3 had anterior uveitis. The majority (18/34) of seropositives were in the age group of 30-60 years. The seropositivity in males (34%) was higher than in females (29.7%) but this difference was not significant. Of the patients who were seropositive, 80% presented with poor vision and all seropositive patients had unilateral eye lesions.

This study shows for the first time in Sri Lanka, the impact of ocular toxoplasmosis in the community. There was 33.7% seroprevalence of toxoplasmosis among clinically suspected patients indicating a high level of transmission. The study indicates that toxoplasmosis plays an important role in uveitis thus stressing the need for laboratory tests to confirm *Toxoplasma* aetiology in clinically suspected patients. Improved molecular diagnostic techniques are recommended to diagnose and treat toxoplasmosis in the acute stage in order to minimize the deleterious effects on the eye.

Funding: NRC Grant 07/38.