

## LETTER TO THE EDITOR

### THE CLOSE RELATIONSHIP BETWEEN TOXOPLASMOSIS AND KIDNEY FUNCTION

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Dear Sir

The recent article by TOPOROVSKY *et al.* was highly interesting<sup>9</sup>. The association of toxoplasmosis and renal function extends beyond nephrotic syndrome.

For instance, toxoplasmosis is common after renal transplantation. An incidence rate of 0.14 % was reported in a recent study<sup>3</sup>. GHARAVI *et al.* in another study have reported secondary infection in 3% of renal transplant patients<sup>4</sup>. Primary infection usually occurs in a majority of the patients with incidence as high 81.8% being reported. Sero-negative patients are 15 times more likely to develop toxoplasmosis following renal transplant.

Toxoplasmosis secondary to renal transplantation is associated with significant morbidity. The median time to diagnosis of toxoplasmosis following renal transplantation is about 92 days<sup>3</sup>. Mortality rates as high as 14% have been reported. Toxoplasma infection usually causes enlargement of the spleen and lymphadenopathy. Atypical cerebral toxoplasmosis may occur following renal transplantation<sup>2</sup>. Encephalitis secondary to toxoplasmosis infection may occur in chronic renal failure patients secondary to immunosuppressive steroid therapy. Other patients may develop brain abscess. Lung infestation may result in pneumonia. Similarly cardiac tissue can be affected resulting in myocarditis. Rarely left ventricular failure has been reported<sup>7</sup>. Hemo-phagocytic syndrome is another rare manifestation of post transplantation toxoplasmosis<sup>5</sup>.

Enzyme-linked immunosorbent assay (ELISA) and enzyme-linked fluorescence assay (ELFA) tests are commonly used in detecting anti-*Toxoplasma* antibodies in renal transplant recipients<sup>8</sup>. NISSAPATORN *et al.* in a recent study have reported an overall sero-prevalence of latent toxoplasmosis of 51% in renal patients. The highest positivity rate for anti-*Toxoplasma* IgG & IgM antibodies is seen in the 20 years to 30 years age group<sup>6</sup>. In chronic renal failure the risk of toxoplasmosis is increased with higher exposure to dialysis. Anti-*Toxoplasma* IgM antibodies are detected in sero-positive patients following renal transplants during the first year in nearly 86% of patients. Nearly 57% of patients on hemodialysis demonstrate anti-*Toxoplasma* IgG antibodies in one recent study<sup>1</sup>. All renal transplant donors should be screened for anti-*Toxoplasma* IgM antibodies. Infact, all renal transplant recipients should be administered trimethoprim/sulfamethoxazole for at least half a year following renal transplantation.

The above examples clearly illustrate the close association between toxoplasmosis and renal function and the need to fully screen renal transplant patients for toxoplasmosis.

Shailendra KAPOOR  
Private practice, Mechanicsville, VA, USA  
University of Illinois at Chicago, Chicago, USA  
E-mail: shailendrakapoor@yahoo.com

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