

Screen of Uremic Patients for Toxoplasmosis Before Kidney Transplantation

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Dear Editor,

With interest, we read the article by Beladi Mousavi and Faramarzi (1) entitled "Do we Need to Screen Uremic Patients for Toxoplasmosis before Kidney Transplantation" in your journal. In a cross sectional study, the author evaluated 22 patients with end stage renal disease (ESRD) candidate for kidney transplantation and 30 donors for toxoplasmosis before transplantation in Khuzestan province, Iran. The results of this study showed that about a half of donors and recipients candidate for kidney transplantation in the Khuzestan province of Iran had Toxoplasma IgG antibody and therefore exposure to the infection. In the end of the study, they suggested that both the recipient and the donor should be routinely tested for toxoplasmosis before transplantation to avoid kidney donation from seropositive donor to seronegative recipient (1). The results of the study are interesting, but it is limited due to short duration and small number of patients enrolled in the study and therefore multicenter clinical trials with long duration and larger number of patients are needed for better evaluation of this suggestion. Although the results of the study are limited, we agree with the author for this suggestion. Toxoplasmosis is an opportunistic pathogen among immunocompromised patients including solid organ transplant recipients and it has been recognized as a potential donor-to-host transmission infection after transplantation (2-5). It can contribute in increment of morbidity and mortality in these patients (6-13).

The transmission of infection occurs mainly in seronegative heart transplant recipients from seropositive donors. It is also suggested that the myocardium is one of the sites, which the cysts of *Toxoplasma gondii* are located and therefore the transmission of infection occurs after heart transplantation from seropositive donors to seronegative recipients (14). Transmission of infection from seropositive donors to seronegative recipients has

been described infrequently after liver transplantation (15). The transmission of infection from seropositive donors to seronegative recipients is also infrequent after renal transplantation; however, the mortality of this complication is high among renal transplant recipient and as 50% based on some studies; therefore, efforts to identify patients at risk or to avoid kidney donation from seropositive donors are required (16).

Screening recipient candidate for solid organ transplantation for IgM and IgG anti-toxoplasma antibodies before transplantation is also helpful for better follow-up of seropositive recipients for reactivation of latent tissue cysts following immunosuppressive treatments (17). It has been reported that immunosuppressive treatments after transplantation could reactivate latent tissue cysts to active toxoplasmosis (18).

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Authors' Contributions

Both authors equally worked in preparing the manuscript.

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