

A New Test Required Instead of Tuberculin Skin Test in Liver Transplant Recipients

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Dear Editor

In Liver Transplant (LT) recipients' effective diagnosis and treatment of Latent Tuberculosis (TB) infection is essential because immunosuppression can lead to severe and life-threatening TB reactivation. In addition, the management of latent TB infection in LT recipients is intricate by the potential of isoniazid induced hepatotoxicity, which can be difficult to discriminate from rejection and other causes of allograft dysfunction as well as possible drug interactions [1]. We want to add some points which may take into consideration about LT recipients.

The performance of Tuberculin Skin Test (TST) for detection of latent TB infection has been considered to be suboptimal because of false negative results in patients with underlying organ dysfunction, malnutrition, immune suppression, or concurrent viral illness and false-positive results from infection with environmental mycobacteria and Bacille Calmette-Guerin (BCG) vaccination [2]. TST has many limitations including inter-individual variability of placement and reading of TST and the requirement of the patient to return 48-72 h after placement for test reading [3]. In our experience, LT recipients with viral etiology showed higher PPD results than non-viral etiology and recipients did not develop active TB during follow-up. We concluded that TST is not a reliable method to detect latent TB in cirrhosis patients caused by HBV and HCV [4]. Jafri *et al.* also found a significantly higher rate of HCV infection in the TST positive subgroup of adult LT candidates and they attributed this higher rate to alcohol

abuse [1]. Interferon γ Release Assays (IGRAs) have potentially improved specificity by distinguishing positive TST results due to a previous BCG vaccination or an infection with atypical mycobacteria [1,5]. Labue PA *et al.* mentioned that IGRAs are new diagnostic tools that provide certain advantages over TST [3]. They implicated that each institution should choose suitable test for their target populations. We think that the use of IGRAs in LT recipients might reduce the number of people considered for isoniazid chemoprophylaxis and agree that a blood test might replace the TST in LT recipients.

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References

1. Jafri SM, Singal AG, Kaul D, Fontana RJ (2011) Detection and management of latent tuberculosis in liver transplant patients. *Liver Transpl* 17: 306-314.
2. Kim SY, Jung GS, Kim SK, Chang J, Kim MS, et al. (2012) Comparison of the tuberculin skin test and interferon- γ release assay for the diagnosis of latent tuberculosis infection before kidney transplantation. *Infection* 17.
3. LoBue PA, Castro KG (2012) Is it time to replace the tuberculin skin test with a blood test? *JAMA* 308: 241-242.
4. Celikbilek M, Selcuk H, Yilmaz U (2012) The effect of hepatotropic virus (HBV-HCV) infections on tuberculin skin test in patients with cirrhosis. *Turk J Gastroenterol* 23: 234-238.
5. Menzies D, Pai M, Comstock G (2007) Meta-analysis: new tests for the diagnosis of latent tuberculosis infection: areas of uncertainty and recommendations for research. *Ann Intern Med* 146: 340-354.

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