RISK FACTORS OF LATENT TUBERCULOSIS AMONG HEMODIALYSIS PATIENTS

Yusup Subagio Sutanto, Astuti Setyawati

Department of Medical Pulmonology and Respiratory, Faculty of Medicine, Universitas
Sebelas Maret/ Dr. Moewardi Surakarta Hospital

ABSTRACT

Background: Tuberculosis (TB) remains one of the most important infectious diseases worldwide. Latent TB occurs when a person has the TB bacteria within their body, but the bacteria are present in very small numbers. Tuberculosis in end-stage renal disease patients on regular hemodialysis (HDPs) presents a number of diagnostic challenges. This study aimed to investigate the risk factors of latent tuberculosis among hemodialysis patients.

Subjects and Method: This was a cross sectional study carried out at Dr. Moewardi Hospital, Surakarta, Central Java, in May 2018. A total of 30 patients was selected for this study. Latent tuberculosis was measured by recorded baseline data, tuberculin skin test (TST), and T-SPOT.

Results: 23.3% patients were latent tuberculosis, 20% had positive TST, and 16.7% had T-SPOT.TB positive. Hemodialysis was significantly associated with positive TST results (OR= 0.04; 95% CI=0.01 to 0.89; p=0.042). Gender, age, body mass index (BMI), comorbidities, TB contacts, Bacille Calmette Guerin (BCG), duration of hemodialysis, and the number of T lymphocyte cells cluster of differentiation 4+ (CD4+) were not significantly associated with latent tuberculosis.

Conclusion: Hemodialysis is significantly associated with positive TST results.

Keywords: risk factors, latent tuberculosis, TST, T-SPOT. TB, hemodialysis

Correspondence:

Yusup Subagio. Department of Medical Pulmonology and Respiratory, Faculty of Medicine, Universitas Sebelas Maret/ Dr. Moewardi Surakarta Hospital, Central Java.
Email: dr_yusupsubagio@yahoo.com. Mobile: 0811284165.