

Abstract Type : Poster
Presentation No. : PDL 050

Prevalence of positive interferon-gamma release assay among dialysis patients: a cross-section study in a tertiary care hospital in South Korea

Ye Na Kim, Yeonsoon Jung, Jae Hyuc Choi, Ho Sik Shin, Hark Rim
Department of Internal Medicine-Nephrology, Kosin University College of Medicine, Korea, Republic of

Objectives: Tuberculosis (TB) is a common infectious disease in dialysis patients who have profound alterations in immune response. The risk for tuberculosis among dialysis patients is important but unclear. This study was determined the various associated factors on latent tuberculosis infection (LTBI) in patients with dialysis in Korea.

Methods: This cross-sectional study was conducted in a tertiary care hospital in South Korea in August 2017. Hemodialysis (HD) and peritoneal dialysis (PD) patients were tested with interferon-gamma release assay (IGRA) and filled out a questionnaire for the purpose of LTBI association factor assessment and analysis. The variables (BMI, chest X-ray finding, duration, smoking, previous contact with a person with active TB, previous active TB history) that were associated univariate with IGRA result in the chi-squared test were included in a logistic regression model.

Results: One hundred eight patients (94 in HD group) were sequentially enrolled. The overall prevalence of positive IGRA was 62 (57.4%) with 55 (58.5%) in HD group and 7 (50.0%) in PD group. The main independent variables associated with a positive IGRA were low BMI < 18.5 with the reference of BMI \geq 25, previous contact with a person with active TB and previous active TB history. The main independent variables associated with a positive IGRA in HD group were long duration of HD (OR = 4.93) with the reference of 1-12 months, previous contact with a person with active TB (OR = 5.04, 95% CI: 1.13-22.39) and previous active TB history (OR = 6.18, 95% CI: 1.01-37.80).

Conclusions: The prevalence of positive IGRA was more than 50% among dialysis patients in a tertiary care hospital in South Korea. Therefore, routine screening test for LTBI with IGRA in dialysis in Korea were recommended especially for patients with low BMI and long duration of HD more than 1 year.