ABSTRACT

Assosiation Positivity of *Nontuberculous Mycobacteria* (NTM) and

Severity Pulmonary Tuberculosis Patients

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Purpose:The research aims to detect a positive association between*Non tuberculous Mycobacteria* and the severity of pulmonary Tuberculosis patients and to find out what spesies of NTM is detected in patients with pulmonary TB.

Method: This study was conducted 40 isolat *Mycobacteria* at laboratory Clinical Microbiology Soetomo Hospital from patient TB .Colonies were then examined using immunochromatographic antigen MPT 64, then a molecular test was performed using PCR and sequencing.

 Result: The result showed from 40 samples were used, 20 *isolat*were NTM and 20 *M.tuberculosis complex*. Sequencing of 20 samples were positive by PCR 116SrRNA, and detected *Mycobacterium kansasii (30%), Mycobacterium gordonae (5%), Mycobacterium parascrofulaceum (2,5%), Mycobacterium simiae (2,5%) Mycobacterium avium (2,5%), Mycobacterium terrae(2,5%).* Clinical severity by Bandim TB score from patients medical record showed asignificant assosiation between positivity of NTM detection and the severity among Tuberculosis patients , with p value =0,03.

 Conclusion: This finding suggest that NTM infection detection is associated with disease severity of pulmonary TB..

Key word: *Nontuberculous Mycobacteria*, Severity Class, Tuberculosis