Prevalence of Mycobacterium abscessus among patients infected with nontuberculous mycobacteria

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Abstract

Introduction: Considering the importance of ~~increasing the~~the increasing incidence of non-tuberculous mycobacteria, especially Mycobacterium abscessus ~~from around the world~~worldwide, ~~We~~ we have conducted a study to evaluate the incidence of these diseases in our area. The aim of this study was to evaluate the prevalence of Mycobacterium abscessus in patients with non–tuberculous mycobacteria.

Materials and methods: This descriptive study was performed on 18083 samples isolated from patients with non-tuberculous mycobacteria during 2016-2017 years at the Mycobacteriology Research Center (MRC). To identify the Mycobacterium species, a 439bp fragment of the IS6110 gene was first amplified using Primers TB1 and TB2. ~~Samples that~~that the samples with ~~had~~ a ~~PCR~~ negative PCR result were analyzed~~,~~ t~~T~~o investigate non-tuberculosis mycobacteria, especially Mycobacterium abscessus using RFLP method~~, were analyzed~~.

Results: Of the 18083 samples, 5513 (30.49%) strains of Complex Tuberculosis and 236 (1.31%) strains of NTM were identified. The mean age of the patients studied was 18 years, and most of them were male. The most commonly identified species in this study were Mycobacterium abessus type 1 32 (13.56%) and Mycobacterium abscessus type 2 13 (5.51%).

Conclusion: In this study, we observed a high prevalence of Mycobacterium abscessus type 1 in patients. ~~Given that~~As the treatment protocol for non-TB mycobacteria with Mycobacterium tuberculosis ~~Complex~~ complex is different~~.~~ ~~Therefore,~~ the diagnosis of these species as soon as possible will be significant for ~~doctors~~physicians.

Keywords: Mycobacterium abscessus, NTM, Prevalence, PCR