

# IDENTIFYING NON-TUBERCULOUS MYCOBACTERIUM LUNG DISEASES IN ACID-FAST BACILLI POSITIVE PATIENTS

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**Abstract.** We conducted a case-control study by comparing the clinical and radiographic features of acid-fast bacilli positive patients with pulmonary tuberculosis (PTB) to those with non-tuberculous mycobacterium (NTM) lung diseases diagnosed according to American Thoracic Society (ATS) criteria. The occurrence of NTM lung disease was associated with persistence in symptoms after the fifth month of treatment ( $p=0.018$ ), middle lobe involvement ( $p<0.01$ ), lower lobe involvement ( $p=0.004$ ), multiple lobe involvement ( $p=0.001$ ) and reticulo-nodular infiltration ( $p=0.041$ ). On logistic regression analysis, persistence of symptoms after 5 months of treatment ( $p<0.001$ ), middle lobe involvement ( $p<0.001$ ) and lower lobe involvement ( $p<0.05$ ) were significant predictors of NTM lung disease. These findings suggest physicians should consider NTM lung disease if there is involvement of the middle lobe or lower lobes on chest radiography or the persistence of symptoms at the fifth month of treatment.

**Key words:** non-tuberculous mycobacterium, acid-fast bacilli, identification

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