Investigation of the Risk Factors for the Clinical Progression of Pulmonary *M. avium complex* Diseases

Takemasa MATSUMOTO ¹, Ryousuke HIRANO ², Masaki FUZITA ³,
Kentarou WATANABE ¹, ³

¹ Department of respiratory medicine, Faculty of Medicine, Fukuoka University Hospital
² Fukuseikai Hospital
³ Department of respiratory medicine, Faculty of Medicine, Fukuoka University

**Abstract**

The aim of this study was to detect the risk factors for the clinical progression of pulmonary *M. avium complex* (*MAC*) diseases. This study was a retrospective study, and the data were collected from medical records. Forty seven patients with MAC syndrome who visited in our hospital for more than three years between June 1, 2001 and December 31, 2010 were enrolled. The definition of MAC disease was determined by Japanese guidelines. The exacerbation group with chest X-rays were 9 patients and non-exacerbation group were 38 patients. We compared between exacerbation group and non-exacerbation group for detection of the risk factors for progression. As a result, a cavitary lesion and smear-positive on sputa were considered to be the risk factors. These patients should be carefully followed and the initiation of treatment should be carefully considered.

**Key words:** Pulmonary *M. avium complex* (*MAC*) diseases, Risk factors, Nontuberculous mycobacterial infection