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学位論文の題名	<p>Serodiagnosis of Mycobacterium avium-complex pulmonary disease with an enzyme immunoassay kit that detects anti-glycopeptidolipid core antigen IgA antibodies in patients with rheumatoid arthritis (関節リウマチ患者における Mycobacterium avium-complex 関連肺疾患での抗 glycopeptidolipid core antigen IgA 抗体を用いた EIA キットによる血清学的診断)</p> <p>Modern Rheumatology. Vol. 21:144-149, 2011</p>
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Abstract

Nontuberculous mycobacteria (NTM) are a large, diverse group of environmental organisms. They cause a variety of diseases in humans, notably severe, protracted lung disease in patients with underlying lung disorders. In Japan, *Mycobacterium avium* complex (MAC) accounts for approximately 70% of NTM. Rheumatoid arthritis (RA) has many pulmonary manifestations, including bronchial abnormalities that can develop into MAC pulmonary disease (PD). MAC-PD can be lethal in patients receiving tumor necrosis factor-alpha blockers despite administration of antibiotics. Diagnosis of MAC-PD is often difficult, because MAC is an environmental organism. In this study, we investigated the usefulness of serodiagnosis of MAC-PD in RA patients by using an enzyme immunoassay (EIA) kit that detects anti-glycopeptidolipid (GPL) core antigen IgA antibodies. Antibody levels were measured in 63 patients with RA: 14 with MAC-PD plus 3 cultured NTM other than MAC, 16 with pulmonary abnormalities characterizing NTM but undetected in sputum culture, and 30 control subjects. RA patients with MAC-PD showed significantly higher antibody levels than controls ($p = 0.02$). The cutoff point was set at 0.7 IU/l, making the sensitivity and specificity of the antibody in MAC-PD and control patients 43% and 100%, respectively. The EIA kit is useful for diagnosis of MAC-PD in RA patients because of its high specificity. This test is an easier and less invasive form of examination and could therefore replace bronchoscopy as the main diagnostic procedure for RA patients with MAC-PD.