Therapeutic Effects of Various Initial Combination Chemotherapy Including Clarithromycin Against Mycobacterium avium Complex Pulmonary Disease.

BACKGROUND: To find optimal initial combination chemotherapy including clarithromycin (CAM) against treatment-naive Mycobacterium avium complex (MAC) pulmonary disease assessed by microbiological conversion using mycobacterium growth indicator tube (MGIT).

METHODS: Thirty-four patients with treatment-naive MAC pulmonary disease (American Thoracic Society criteria, in 1997) were retrospectively evaluated. They demonstrated a nodular and bronchiectatic pattern without cavity on high-resolution CT (HRCT). Three regimens were administered: Regimen A (n = 9) consisted of CAM 400mg/d, ethambutol (EB) 750mg/d and rifampicin (RFP) 450mg/d, Regimen B (n = 12) consisted of CAM 800mg/d, EB 750mg/d, and RFP 450mg/d. Regimen C (n = 13) consisted of CAM 800mg/d, EB 1000mg/d and RFP 600mg/d, during the first 2 months followed by a reduction of EB from 1000 to 750mg/d. Sex, age, body mass index, and HRCT finding scores were not significantly different among 3 groups. Chemotherapy was continued for 18 months. Sputum culture was periodically assessed by MGIT.

RESULTS: Culture conversion at 18 months in regimen A (55.6%) including daily 400mg of CAM (9.5mg/kilogram) was significantly inferior to that of regimen B (91.7%) including daily 800mg of CAM (17.6mg/kg) [p < 0.05], but regimen B and C (92.3%) showed no between-group difference > 18 months of chemotherapy.

CONCLUSIONS: The higher dose of CAM allowed better culture conversion. Daily combination chemotherapy including CAM 800mg seems appropriate as initial treatment against treatment-naive nodular and bronchiectatic MAC pulmonary disease.

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