Medical treatment of Mycobacterium avium complex (MAC) pulmonary disease has been disappointing. Relapses after medical therapy without macrolide treatment regimens are common. In this issue of the Journal the clinical effects of clarithromycin for the treatment of M. avium complex disease is reported (1). Clarithromycin is considered to be effective for the treatment of M. avium complex infections. However, clarithromycin resistance develops in patients receiving clarithromycin alone. Therefore, combined therapy is required to treat M. avium complex infection.

See also p 670.

Official statement of the American Thoracic Society is that initial therapy for adult HIV-negative patients with M. avium complex disease needing treatment should consist of a minimum three-drug regimen of clarithromycin (500 mg twice a day) or azithromycin (250 mg/day or 500 mg three times a week), rifabutin (300 mg/day) or rifampin (600 mg/day), and ethambutol (25 mg/kg per day for 2 months followed by 15 mg/kg per day). For patients of small body mass and/or an age over 70, clarithromycin at 250 mg twice a day or azithromycin 250 mg three times a week may be better tolerated (2). A nationwide study was conducted in Japan to investigate the efficacy of clarithromycin on pulmonary atypical mycobacteriosis caused by M. avium complex and concluded that at a daily dose of clarithromycin of 600 mg or higher was effective in the elimination or reduction of M. avium complex without the development of serious side effects (3). And the Japanese Society for Tuberculosis recommends the combination therapy consisting of clarithromycin, rifampicin, ethambutol and aminoglycoside (4). However, clarithromycin is approved only for the treatment of bacteraemia due to M. avium complex in acquired immunodeficiency syndrome (AIDS) patients in Japan.

The optimal length of drug therapy for M. avium complex lung disease has not been established. With macrolides, a shorter length of therapy seems acceptable. Long-term studies of M. avium complex lung disease have been reported (5, 6), and suggest that culture negativity of 10 to 12 months is adequate for most patients.

Acid-fast bacilli (AFB) smears and cultures of sputum should be obtained monthly during therapy for pulmonary M. avium complex disease to assess response, and then periodically after completion of therapy to evaluate possible relapse. The desired endpoint is negative sputum cultures; patients who respond to therapy should develop negative AFB smears and cultures. One or more cultures containing small numbers of M. avium complex organisms (single colonies on solid media or positive liquid media cultures only) may occur after sputum conversion and should not necessarily be interpreted as indicative of treatment failure or relapse. Rather, these culture results should be interpreted in light of the patient’s overall clinical status.
References


