

CLINICAL ANALYSIS OF NONTUBERCULOUS MYCOBACTERIAL INFECTION COMPLICATED BY PLEURISY

Toshikatsu SADO, Yasukiyo NAKAMURA, and Hideo KITA

Abstract [Objective] There are few reports describing pleurisy caused by nontuberculous pulmonary mycobacteriosis; in addition, there are few reports describing the frequency of cases.

[Method] We retrospectively studied 116 consecutive cases of nontuberculous mycobacteriosis occurring between January 2009 and January 2014.

[Result] Of these, 7 patients (6.0%) were diagnosed with pleuritis caused by nontuberculous pulmonary mycobacteriosis. One patient each had a history of ulcerative colitis, rheumatoid arthritis treated with steroids, and retinitis pigmentosa. Pleural effusion was examined in all 7 cases. In addition, nontuberculous mycobacteria were cultured from pleural effusion in 4 of the 7 cases; all were cases of *Mycobacterium avium* complex infection. The mean adenosine deaminase level in pleural effusion was 86 U/mL, and in 5 out of 7 cases, the

adenosine deaminase level was greater than 50 U/mL. Pneumothorax occurred with pleuritis in 5 cases. Pleuritis was treated with NTM therapy in 5 cases, and pleural effusion decreased or cleared completely in all cases.

[Conclusion] To reveal pleurisy accompanied by nontuberculous mycobacteriosis, further consideration is needed.

Key words: Nontuberculous mycobacteriosis, Pleurisy, Pneumothorax

Takatsuki Red Cross Hospital

Correspondence to: Toshikatsu Sado, Takatsuki Red Cross Hospital, 1-1-1, Abuno, Takatsuki-shi, Osaka 569-1045 Japan. (E-mail: toshsado@gmail.com)

TUBERCULOSIS ANNUAL REPORT 2012

— (4) Tuberculosis Treatment and Outcomes —

Tuberculosis Surveillance Center (TSC), RIT, JATA

Abstract Re-treatment frequency among patients newly diagnosed with tuberculosis (TB) might indicate inadequate prior treatment. Of 21,283 patients diagnosed with TB in 2012, 1,336 had received prior TB treatment. Among patients requiring re-treatment, more than half ($n=749$) had received treatment after 2000. The initial recommended TB treatment regimen in Japan consisted of a combination of isoniazid, rifampicin, pyrazinamide, and ethambutol or streptomycin. This regimen was used to treat approximately 90% of patients aged 15–49 years with all forms of TB. However, the proportion of patients substantially declined among patients ≥ 80 years of age. Of 13,650 patients who started a pyrazinamide TB treatment regimen in 2011, approximately 10% were unable to complete the 2-month-long pyrazinamide regimen by the end of 2012.

In 2012, 16,432 patients were newly diagnosed with pulmonary TB (PTB). The proportion of patients hospitalized at the beginning of TB treatment increased among those ≥ 30 years of age. The median hospitalization duration among newly diagnosed patients with all forms of TB in 2011 was 64 days. The durations for those who had a new positive sputum smear result, were undergoing re-treatment, had a positive sputum result in other bacteriological tests, and had bacteriologically negative sputum PTB were 70, 72, 44, and 39 days, respectively. The median hospitalization duration was 43 days among patients with extrapulmonary TB. At the end of 2012, the median treatment duration in patients

diagnosed in 2011 with all forms of TB was 273 days.

The treatment success rates for patients who had a new positive sputum smear result ($n=7,736$), were undergoing re-treatment ($n=747$), had a positive sputum result in other bacteriological tests ($n=6,049$), and had a bacteriologically negative sputum result (including other PTB patients) ($n=2,917$) registered in 2011 were 50.6%, 41.2%, 58.0%, and 62.5%, respectively. The rate of loss to follow-up among patients who had a new positive sputum smear result and were undergoing re-treatment was 3.3% each, well below 5%. The mortality rate among patients with new sputum smears positive for PTB was 21.6%; $>20\%$ died before completing the treatment course. Patients 70–79, 80–89, and ≥ 90 years of age had relatively high death rates (23.9%, 36.6%, and 44.0%, respectively) compared with the other age groups.

Key words : Tuberculosis, Treatment history, Treatment status, Duration of treatment, Treatment outcomes

Research Institute of Tuberculosis (RIT), Japan Anti-Tuberculosis Association (JATA)

Correspondence to: Tuberculosis Surveillance Center (TSC), Research Institute of Tuberculosis (RIT), JATA, 3-1-24, Matsuyama, Kiyose-shi, Tokyo 204-8533 Japan.
(E-mail: tbsur@jata.or.jp)