Original Article

ASSESSMENT OF SELF-DISCHARGE OF HOMELESS PATIENTS WITH TUBERCULOSIS

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Abstract [Objectives] Factors responsible for the premature self-discharge of homeless tuberculosis (TB) patients from the hospital and the association between the self-discharge and treatment interruption were assessed.

[Methods] A total of 205 homeless patients with TBs who were newly registered between January, 2007 and June, 2008 were evaluated. The subjects were divided into two groups (those who were discharged themselves from the hospital prematurely ["case" group] and those who were not [control group]), and the difference between the groups regarding the factors possibly responsible for the self-discharge was evaluated.

[Results] i) Patient's characteristics: The subjects were all men; there were 45 in the "case" group and 160 in the control group. The proportion of subjects aged under 60 years was significantly higher in the "case" group (84.4%) than in the control group (52.5%). The proportion of subjects who consumed 360 mL or more of sake a day was significantly higher in the "case" group (64.4%) than in the control group (38.8%). ii) Questionnaire survey on admission: All of the patients were hospitalized for treatment of TB. In the interview on admission, more "case" group patients reported "I do not know much about TB" or "I am dissatisfied with my hospitalization", as shown by multiple logistic regression analysis. A review of troubles with inmates or healthcare workers over alcohol drinking or smoking showed that the proportion of subjects who had such troubles was significantly higher in the "case" group (55.6%) than in the control group (5.0%). iii) The association between the treatment outcomes and the self-discharge: The proportion of subjects with treatment outcomes of "cured" or "treatment completed" was significantly lower in the "case" group (46.7%) than in the control group (78.8%). The proportion of subjects with a treatment outcome of "defaulted" was significantly higher in the "case" group (42.2%) than in the control group (3.8%).

[Conclusion] The patients who were aged under 60 years or who consumed 360 mL or more of sake a day were shown to be significantly more likely to discharge themselves prematurely, which warrants a more careful handling of such problems. The poor understanding of disease necessitates more adequate explanation of TB, or education, considering each patient's level of understanding. In addition, the patients' dissatisfaction with their hospital stay, as seen in the case group, should be more carefully addressed in order to avoid the higher rate of trouble.

Key words: Tuberculosis, Homeless patient, Self-discharge, Adherence, Patient support, Education

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-----Original Article

THE IMPLEMENTATION STATUS OF COMMUNITY DIRECTLY OBSERVED THERAPY SHORT-COURSE (DOTS) PRACTICE IN MEDICAL FACILITIES DESIGNATED FOR TUBERCULOSIS TREATMENT IN THE TAMA AREA

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Abstract [Objectives] We conducted a survey of tuberculosis (TB) treatment and community Directly Observed Therapy, Short-course (DOTS) practice of doctors at the medical facilities designated for TB treatment in the Tama area, Tokyo, to determine the current status and issues of community DOTS and to enhance cooperation between public health centers and medical institutions.

[Methods] A self-administered questionnaire was sent by postal mail to 500 medical institutions selected through stratified random sampling in each public health center region.

[Results] We received 287 (57.4%) replies. Of these, 169 (58.9%) had not treated TB patients in the previous 2 years. A total of 48.8% of the doctors were aware of DOTS, and 2.8% were currently conducting DOTS, while 18.7% wanted to conduct DOTS. In contrast, 51.2% had barriers to conducting DOTS, and 27.2% had no plans to conduct DOTS. Knowledge of DOTS was correlated with the future possibility of conducting DOTS and with the use of medication diaries. Doctors in private clinics had lower participation rates in

seminars compared to those doctors in hospitals.

[Conclusion] In order to expand DOTS it is necessary to provide private doctors with educational tools with which doctors can update their knowledge of TB treatment.

Key words: DOTS, Medical facilities designated for tuberculosis treatment, Medication diary, Public health center, Community

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Case Report

A CASE OF MILIARY TUBERCULOSIS WITH ESOPHAGEAL PERFORATION AND A TRACHEAL INFLAMMATORY POLYP SECONDARY TO MEDIASTINAL LYMPHADENITIS CAUSING MASSIVE HEMATEMESIS AND HEMOSPUTUM

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Abstract A 62-year-old man with a history of left nephrectomy due to tuberculosis was referred to our hospital, because chest radiography showed diffuse miliary shadows in the bilateral lung fields, and acid-fast bacilli were detected from his hemosputum after steroid therapy for fever of unknown origin. Chest computed tomography showed mediastinal lymph node enlargement with partial calcification of these lymph nodes together with the presence of air. He was diagnosed with miliary tuberculosis and tuberculous mediastinal lymphadenitis and anti-tuberculosis drug therapy was started. Massive hematemesis occurred 11 days after the start of the treatment. Although gastroendoscopy was performed, the bleeding point could not be identified. The patient's symptoms improved after conservative therapy. Repeat gastroendoscopy showed a submucosal nodule with laceration of the esophageal mucosa, 30 days after admission for the examination of melena and progression of anemia. The episodes occurred because of esophageal perforation secondary to tuberculous mediastinal lymphadenitis. Bronchoscopic examination for hemosputum showed an inflammatory polypoid lesion in the left tracheal wall. These symptoms improved with anti-tuberculosis drug therapy. In our case, mediastinal lymphadenitis progressed to

miliary tuberculosis because of endogenous reactivation. We report a rare case of esophageal perforation with a tracheal inflammatory polyp secondary to tuberculous mediastinal lymphadenitis. In cases of tuberculous mediastinal lymphadenitis, if hematemesis or hemosputum is observed, an endoscopic examination should be performed.

Key words: Tuberculous mediastinal lymphadenitis, Miliary tuberculosis, Perforation of tuberculous mediastinal lymphadenitis, Tracheal inflammatory polyp, esophageal bleeding, hemosputum

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-----Report and Information

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Tuberculosis Surveillance Center, RIT, JATA

Abstract The condition of tuberculosis (TB) at the time at which an individual is diagnosed with TB influences the patient's prognosis. This paper focuses on the condition of TB at the time of the diagnosis based on bacteriological status and X-ray findings.

The proportion of bacteriologically confirmed cases among newly notified pulmonary TB patients increased greatly from 25.7% in 1979 to 82.7% in 2009. During this period, the proportion of far-advanced cavitary cases among pulmonary TB patients was around 2% and remained stable. This may mean that the diagnosis had come to be performed bacteriologically rather than radiologically.

The proportion of bacteriologically confirmed cases among newly notified pulmonary TB patients in 2009 was studied by sex and 5-year age group. The proportion of bacteriologically confirmed cases increased with age in both male and female TB patients. In male TB patients, the proportion of cavitary cases increased in patients aged up to the end of the 50s and then decreased with age. This tendency was not observed in females. Although the proportion of cavitary cases among elderly TB patients was lower than among youths, the

proportion having extensive lesions was greater than that among youths.

The proportion of sputum-smear-positive cases with cavities among pulmonary TB patients aged 30–59 years was 32.9 % in male TB patients and 17.1% in female TB patients. According to occupation, this proportion was highest in "temporary workers" (52.6%) for male TB cases and "jobless/others" (24.9%) for female TB cases, and lowest among "medical workers" in both sexes: 8.3% of male TB cases and 7.4% of female TB cases.

Key words: Tuberculosis, Bacillary, Sputum smear positive, X-ray, Cavity, Sex, Age, Occupation

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