
Field Activities

TUBERCULOSIS CONTROL IN HEALTH CARE FACILITIES FOR THE ELDERLY,
FROM THE VIEWPOINT OF RISK MANAGEMENTMasako OHMORI, Masako WADA, Satoshi MITARAI, Hideki YANAI,
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Abstract [Objectives] To discuss the optimal TB control system in health care facilities for the elderly where the periodic TB screening is currently not obligatory.

[Methods] A study was conducted in three health care facilities for the elderly in Tokyo during the period from 2002 to 2004, and 212 admitted elderly persons were enrolled in this study. Medical charts were analyzed to identify informations about mental and physical conditions and TB risk factors. Questionnaire-based interviews were conducted in 58 residents who had no dementia or no serious conditions. TB mass screening was carried out with a mobile vehicle equipped with computed radiography, financially supported by the Tokyo Metropolitan Government. Since this mobile vehicle is equipped with a special wheelchair for chest X-ray examination, most elderly persons were able to receive chest X-ray examination. Medical chart review and interview were conducted at around the time of TB mass screening. The screening results of 183 elderly residents who received X-ray examination were reviewed.

[Results] Of the 212 persons admitted to the facilities, 73.1% were women. The mean ages of men and women were 80.7 and 84.2 years, respectively. Mental disorders were observed in 42.9% and dysfunction of extremities in 54.7%. At the time of admission, chest X-ray records were submitted by the attending doctors in 73.1% of the residents, but this proportion differed among facilities. From these records, old TB was found in 12.3%; however this proportion was 20.8% according to the TB mass screening results. A history of TB was more prevalent in the group interviewed than in the non-inter-

view group (24.1% vs. 6.5%; $p < 0.001$). Two facilities had conducted TB screening for three consecutive years and comparative reading of chest X-ray films could be done in 35.8%. The remaining facility conducted TB screening for the first time, and comparative reading was not possible. The proportion of cases requiring further investigations was higher in the facility where TB screening was conducted for the first time (2.8% vs. 13.0%; $p = 0.008$). No active TB patient was detected in this study.

[Conclusion] From the viewpoint of risk management for tuberculosis, it is important to establish a system of early case finding for the aged persons admitted to health care facilities for the elderly. Therefore, the information on risk factors should be collected properly at the time of admission, and careful attention should be paid to the residents with risk factors, for the possible development to active disease. X-ray records submitted by the attending doctors or by screening would provide useful informations for early diagnosis, when abnormal shadows are found on chest X-ray films.

Key words: Tuberculosis, Elderly, Health care facility for the elderly, Risk management, TB mass screening

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