Memorial Lecture by Imamura Award Winner

A PRACTICAL STUDY CONCERNING IMPROVEMENTS TO TUBERCULOSIS CARE PRACTICE

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Abstract With tuberculosis now relatively well contained in Japan, it is important to reconfigure treatment systems and structures to ensure the most appropriate treatments in the future. A survey of designated tuberculosis treatment facilities in Hiroshima Prefecture revealed declining standards of tuberculosis diagnosis and treatment as well as decreasing knowledge levels in regional areas, suggesting the need for improved collaboration between tuberculosis specialists and regional health care providers. A tuberculosis care pathway designed to promote improved collaboration between referring medical institutions and clinics, and the DOTS (directly observed treatment, short-course) Notebook for patient advice and assistance with compliance, were developed jointly by the Higashihiroshima Medical Center and the Onomichi Medical Association. Following the introduction of tuberculosis care pathway and the DOTS Notebook, we have seen a number of improvements, notably an increase in successful treatment outcomes in regional areas and fewer patients receiving treatment for more than 12 months. These results suggest that better liaison through the regional coordination pathway has led to improved tuberculosis treatment in regional areas. While further refinements and modifications are necessary, it is clear that this represents a step forward in tuberculosis care, and will provide the impetus to bring about meaningful changes to the system.

Key words: Clinical liaison pathway, Community DOTS, Regional coordination, Standards for tuberculosis care

REPORT FROM THE COMMITTEE OF THE JAPANESE SOCIETY FOR TUBERCULOSIS: A STUDY OF TUBERCULOSIS AMONG FOREIGNERS RESIDENT IN JAPAN, 2008

—With Particular Focus on Those Leaving Japan in the Middle of Treatment—

The International Exchanging Committee of the Japanese Society for Tuberculosis

COMMUNITY MEDICAL LIAISON GUIDELINES FOR TUBERCULOSIS USING THE COMMUNITY COOPERATION CLINICAL PATHWAY

—Medical Institution's Roles in Community DOTS—

The Treatment Committee of the Japanese Society for Tuberculosis

TREATMENT GUIDELINES FOR LATENT TUBERCULOSIS INFECTION

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The Prevention Committee and the Treatment Committee
of the Japanese Society for Tuberculosis

Abstract The treatment of latent tuberculosis infection (LTBI) has been established as valid for patients at high risk for developing active tuberculosis. Treatment of LTBI is also considered an important strategy for eliminating tuberculosis (TB) in Japan. In recent years, interferon-γ release assays have come into widespread use; isoniazid (INH) preventive therapy for HIV patients has come to be recommended worldwide; and there have been increases in both types of biologics used in the treatment of immune diseases as well as the diseases susceptible to treatment. In light of the above facts, the Prevention Committee and the Treatment Committee of the Japanese Society for Tuberculosis have jointly drafted these guidelines.

In determining subjects for LTBI treatment, the following must be considered: 1) risk of TB infection/development; 2) infection diagnosis; 3) chest image diagnosis; 4) the impact of TB development; 5) the possible manifestation of side effects; and 6) the prospects of treatment completion. LTBI treatment is actively considered when relative risk is deemed 4 or higher, including risk factors such as the following: HIV/AIDS, organ transplants (immunosuppressant use), silicosis, dialysis due to chronic renal failure, recent TB infection (within 2 years), fibronodular shadows in chest radiographs (untreated old TB), the use of biologics, and large doses of corticosteroids. Although the risk is lower, the following risk factors require consideration of LTBI treatment when 2 or more of them are present: use of oral or inhaled corticosteroids, use of other immunosuppressants, diabetes, being underweight, smoking, gastrectomy, and so on.

In principle, INH is administered for a period of 6 or 9 months. When INH cannot be used, rifampicin is administered for a period of 4 or 6 months. It is believed that there are no reasons to support long-term LTBI treatment for immunosuppressed patients in Japan, where the risk of infection is not considered markedly high. For pregnant women, HIV-positive individuals, heavy drinkers, and individuals with a history of liver injury, regular liver function tests are necessary when treatment is initiated and when symptoms are present. There have been reports of TB developing during LTBI treatment; therefore, attention should be paid to TB development symptoms.

When administering LTBI treatment, patients must be educated about side effects, the risk of developing TB onset, and the risks associated with discontinuing medication. Treatment outcomes and support for continuation of treatment are evaluated in cooperation with health centers. As stipulated by the Infectious Diseases Control Law, doctors are required to notify a health center when an individual develops TB. Based on this notification, the health center registers the patient, sends a public health nurse to visit the patient and give instructions, and provides medication adherence support. The patient applies at a health center for public expenses for medical care at a designated TB care facility. Pending approval in a review by an infectious disease examination council, the patient's copayment is reduced.