

TRENDS OF TUBERCULOSIS RESEARCHES IN JAPAN  
AND THE ROLES OF *KEKKAKU*

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**Abstract** Based on a recent bibliometrics report on tuberculosis research, a brief introduction was made on the recent trends of scientific publications in English as well as in Japanese by Japanese researchers. The publication of tuberculosis papers in the Japanese journals and the changes in papers accommodated in *Kekkaku*, the official organ of the Japanese Society for Tuberculosis, were analysed. Finally, the roles for *Kekkaku* as a journal in Japanese language to activate the researches in Japan were discussed and some proposals were made.

**Key words:** Bibliometrics, Tuberculosis research, Journal publication

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## INVESTIGATION ON “PATIENT’S DELAY” IN TB DETECTION

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**Abstract** [Objective] The causes of delay in receiving medical examinations (for a period of more than 2 months between the appearance of tuberculosis symptoms and the first examination at a medical institution) were investigated.

[Method] Interviews of 127 smear positive pulmonary tuberculosis patients (study period: June–December, 2008). Subjects were divided into 2 groups: those who showed delay in receiving medical examination (hereinafter referred to as “case”) and those who did not show delay in receiving medical examination (hereinafter referred to as “control”), and the factors causing differences between the two groups were investigated.

[Results] There were 44 case examples and 83 control examples. There were higher rates of “aged under 60”, “employed” and “have no family doctor” among cases, however, none of them were statistically significant. The rate of smokers was significantly higher in cases. At the time of diagnosis, chest X-ray findings were significantly aggravated in cases and cases were also significantly higher in the degree of smear positivity. It was mostly cases that replied “they were not the symptoms of a serious illness” concerning the initial symptoms and, concerning the timing of medical examinations, the

reply “I was busy at work and couldn’t take time off” was significantly higher.

[Conclusion] It is considered that cases do not take symptoms seriously and that many of them do not receive medical examinations. Further, it is also considered necessary to carefully educate smokers in particular.

There were many cases diagnosed as serious on chest X-ray findings and showed higher degree of smear positivity, so it is considered important to reduce delays in receiving medical examinations in order to treat patients early and prevent the spread of infection.

**Key words:** Patient’s delay, Smear positive pulmonary tuberculosis, Smoking, Family doctor, Serious illness

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**Case Report**

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**A CASE OF PYOTHORAX-ASSOCIATED PLEURAL ANGIOSARCOMA  
DIAGNOSED BY AUTOPSY**

Miwako SAITOU and Katsunao NIITSUMA

**Abstract** A 76-year-old man with a dry cough visited our hospital in June 2006. A chest X-ray showed opacification of the left hemithorax and CT demonstrated a soft tissue mass with pleural calcification. At first, we considered he had acute bronchitis with an old tuberculous pyothorax. But, his condition deteriorated with the additional complaint of a left chest pain and shortness of breath in September 2006. Consequently, he was admitted to our hospital. CT demonstrated that the soft tissue mass was growing and was invading the left rib and submammary tissue. Neither CT nor sonographically guided fine needle biopsies and cytological examinations were helpful in diagnosing this disease. He died of respiratory failure 2 months after admission. Autopsy revealed pyothorax and a hemorrhagic tumor from the left side of the thoracic cavity to the chest wall. Microscopic examination showed that atypical cells had proliferated and formed vascular structures, which

were stained positively with anti-factor VIII antibody. Finally, the diagnosis was made of pyothorax-associated pleural Angiosarcoma. Angiosarcoma is rare and difficult to diagnosis, however, we have to keep in mind the presence of disease pyothorax-associated pleural angiosarcoma.

**Key words:** Tuberculosis, Pyothorax-associated, Angiosarcoma, Needle biopsy, Autopsy

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## A CASE OF PERICOSTAL TUBERCULOSIS OCCURRED IN A LONG PERIOD AFTER THORACOPLASTY

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Satoko MIZUNO, Ryuhi SHIMURA, and Fumio YAMAGISHI

**Abstract** A 79-year-old man with past history of thoracoplasty due to pulmonary tuberculosis visited a general clinic complaining of left back pain and left axillary tumor. As the pus of tumor aspirated was positive for PCR-TB, the patient was diagnosed as pericostal tuberculosis and introduced to our hospital. At first, the operation was considered, but the patient had high risk for the operation because he was old and low body weight and the lesion of tuberculosis in his thorax was very extensive. Anti-tuberculous drugs were administered and exclusion of pus by needle aspiration was repeated. After starting the treatment, the size of tumor had reduced gradually. Pericostal tuberculosis should be taken into consideration in case of pericostal mass with past history of

tuberculosis, and the method of treatment should be decided with considering patient's condition.

**Key words:** Pericostal tuberculosis, Tuberculous pleuritis, Sequela of tuberculosis, Recurrence, Tuberculous treatment

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**Case Report**

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**A CASE OF AXILLARY LYMPH NODE TUBERCULOSIS WITH  
PARADOXICAL WORSENING IN BREAST LESION**

Kanako KOBAYASHI, Shuichi YANO, Toshikazu IKEDA, Toru KADOWAKI,  
Kiryo WAKABAYASHI, Masahiro KIMURA, Shigenori ISHIKAWA, and Hiroyasu TAKEYAMA

**Abstract** A 80-year-old woman was admitted to our hospital because of left axillary swelling. Needle biopsy specimen showed negative results on a smear for acid-fast bacilli and PCR. The histological findings showed epithelioid cell granuloma with caseous necrosis. QFT<sup>®</sup>TB-2G showed positivity of 1.9 IU/ml in ESAT-6. We diagnosed tuberculous lymphadenopathy and administered antituberculous drugs. After 3 weeks of treatment, in spite of the regression of lymphadenopathy, mammary swelling had progressed. We performed a biopsy of the mammary lesion, but did not detect any abnormal findings. As the mammary lesion had regressed by the continued treatment of antituberculous drugs, we thought the

mammary swelling was paradoxical worsening.

**Key words:** Axillary lymph node tuberculosis, Mammary gland, Paradoxical worsening

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## TUBERCULOSIS AMONG THE SOCIALLY VULNERABLE POPULATIONS; PERSPECTIVES FROM HUMAN SECURITY CONCEPT

Nobukatsu ISHIKAWA

**Abstract** Tuberculosis (TB) has been and will continue to be the disease of the poor and the socially vulnerable. Current TB epidemiology in Japan shows increasing proportion of TB among the economically and socially poor or vulnerable populations. Though there is no universally recognized set of the definitions, the economically poor who are covered under the social security services including the homeless, foreign migrants, or the aged over 80 years may be considered as consisting the “socially vulnerable population” for TB in Japan. TB among the socially vulnerable has several characteristics, for example, patients are often detected with severe conditions due to delayed diagnosis, and have high defaulter rate during treatment, which causes immature death, or drug-resistant disease. Stop TB Strategy by WHO, responding to the Millennium Development Goals, proposes a new approach which focuses on empowering the patients and the community. Observations from various studies show that DOTS contributes to empowering the patients and the communities. Further effort will be needed to reorient TB programs towards

the perspective of patients’ empowerment. Solely relying on static analyses of TB among the socially vulnerable has its limitations. Dynamic approach, which utilizes human security concepts such as empowerment and patients’ perspective, will be required not only to control TB among the socially vulnerable population but also to holistically tackle the problem of TB for Japan.

**Key words:** TB among socially vulnerable population, Human security, Empowerment, Patients’ perspective

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