

## Bacteriologically-negative Pulmonary Tuberculosis—The Singapore Tuberculosis Control Unit Experience

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### Abstract

**Introduction:** Patients with radiological features suggestive of active pulmonary tuberculosis (PTB) from areas with a high prevalence of the disease have a high clinical likelihood of PTB regardless of the bacteriological findings. It is the established practice in many countries to initiate therapy in such patients. Our study aimed to determine if treatment for bacteriologically-negative PTB in our local population was appropriate and to identify features at presentation that would be predictive of active PTB, as defined by good and appropriate response to anti-tuberculous treatment. **Materials and Methods:** A retrospective review of a randomised sample consisting of 100 bacteriologically-negative PTB patients given a course of anti-tuberculous treatment at the Singapore Tuberculosis Control Unit (TBCU). Based on their treatment response and outcome, patients were classified as probable active or unlikely active PTB. Patients' characteristics, clinical presentation and radiological findings were analysed for their association with likelihood of probable active PTB. **Results:** Fifty-six per cent of patients in this study had probable active PTB. The decision to treat this group of patient was appropriate. There was no serious adverse reaction in the patients treated. The presence of symptoms, especially cough at presentation, a history of contact with tuberculosis and cavitation on chest radiograph, were associated with an increase risk of probable active disease. **Conclusion:** The TBCU's practice to treat patients suspected of having radiological PTB in the setting of negative sputum smear and culture seems to be appropriate in the majority of cases.

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**Key words:** Anti-tuberculous treatment, Negative culture, Negative sputum smear, Pulmonary tuberculosis

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