Case Report

A sputum sample was received from a young woman with a past history of pulmonary mycobacterial disease (< 6 months). She has treated 6 month with first line anti tuberculosis drugs based on clinical symptoms and AFB microscopy (AFB positive) and she has cured. Next time, she came with cough and mild fever again. Molecular based laboratory identification of the sputum specimen confirmed that she has *Mycobacterium abscessus* infection.

After treating with sodium hydroxide (4%) (Sigma), it was centrifuged at 3000 g under refrigerated conditions (at 4°C). The centrifuged deposit was diluted in 1 ml of sterile distilled water to prepare the bacterial suspension. Two slopes of the Lowenstein–Jensen (L-J) medium (Difco), one containing paranitrobenzoic acid (PNB, Sigma) and 7H9 broth medium were inoculated with 100 µl of the bacterial suspension. A small portion of the bacterial suspension (~20 µl) was examined microscopically, using the Ziehl-Neelsen (ZN) stain, to determine the presence of acid fast bacilli (AFB). The centrifuged deposit was diluted in 1 ml of sterile distilled water to centrifuged at 3000 g under refrigerated conditions (at 4°C). The inoculated medium was incubated at 37°C in a 5% CO₂ incubator. The presence of true cording in *M. abscessus* poses a challenge for identification of MTC based on the cord formation.

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identification of NTM is medically important as their susceptibility to antibiotics vary with the species.

In some laboratories, the cord formation is considered as a distinctive feature of the MTC from NTM. Further, using microscopic observation drug susceptible test (MODS) which is used for detecting drug resistant tuberculosis is based on the presence of characteristics cording in drug containing culture medium [4]. However, the recent studies demonstrate that cord formation is not restricted to MCT and it is shared by few NTM species such as *M. marinum* and *M. abscessus* [5,6].

*M. abscessus* is an emerging pulmonary pathogen which shows a high rate of resistance for anti-tuberculosis drug regimens. Thus, infections caused by *M. abscessus* may be misdiagnosed as multidrug-resistant tuberculosis [6]. This is the first report of isolating *M. abscessus* from a clinical specimen in Sri Lanka and it clearly demonstrates that cord formation is not specific to MTC and detection of cording in broth culture should be further investigated before reaching a conclusion.

**References**


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**Figure 1:** Colony appearance of culture on L-J.

**Figure 2:** Appearance of cord of *M. abscessus* under the light microscope (X 1000).

**Figure 3:** Gel photograph showing agarose gel electrophoresis of PCR amplified IS6110 fragment (240 bp). S- Sample, NC negative control, PC- positive control, M- 100 bp molecular marker.