R630
Publication Only
Clinical ID: Mycobacterial infections (including diagnosis)

Bacteraemia caused by *Mycobacterium abscessus* (*sensu stricto*) and *M. massiliense* (*M. abscessus* subspecies *bolletti*): clinical features and susceptibilities of the isolates

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Objectives: *Mycobacterium abscessus* complex, including *M .abscessus* (*sensu stricto*) and *M. massiliense* (*M. abscessus* subspecies *bolletti*), is an emerging pathogen causing various human infections. Few studies, however, have focused on *M. abscessus* complex bacteremia with detailed species differentiation.

Methods: Clinical characteristics of patients with bacteremia due to *M. abscessus* complex who were treated at the hospital from 2005 to 2012 were evaluated. Species identification by matrix-assisted laser desorption ionization-time of flight mass spectrometry and molecular methods and minimum inhibitory concentrations (MICs) using the Sensititre RAPMYCOI panel test (TREK Diagnostic Systems, Magellan Biosciences, West Sussex, UK) for preserved *M. abscessus* complex isolates were performed.

Results: During the study period, 13 patients with *Mycobacterium abscessus* complex bacteremia were found. One patient had two episodes of bacteremia (one caused by *M. massiliense* and one *M. abscessus* with an interval of 9 months. Of the remaining 12 patients, nine patients had *M. massiliense* bacteremia and three had *M. abscessus* bacteremia. They were mainly middle-aged adults with various comorbidities. Steroid usage (5/12) was the most common immunocompromised status followed by malignancy (4/12) and diabetes mellitus (4/12). Surgical wound infection is the most common infection foci in all patients (5/12), particularly in *M. massiliense bacteremia patients* (5/9). Clarithromycin and tigecycline exhibited good in vitro activities. Overall, the 14-day mortality was 16.7% (2/12).

Conclusions: *M. abscessus* complex bacteremia should be considered an emerging opportunistic infection in immunocompromised hosts. Clarithromycin and tigecycline has potent in vitro activities and promising agents for treating infections due to *M. abscessus* complex.