MYCOBACTERIUM PHOCAICUM BACTEREMIA: AN EMERGING INFECTION AMONG PEDIATRIC HEMATOLOGY-ONCOLOGY PATIENTS

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Background and aims: Non-tuberculous mycobacteria (NTM), specifically the rapidly growing (RGM) are ubiquitous in soil, dust, bio-aerosols, and water. NTM may cause Central venous catheter (CVC) associated bacteremia. Heat-shock protein 65 (hsp65) and 16S rRNA genes sequencing is increasingly used for identification of these pathogens. Mycobacterium phocaicum (MPo) was first described in 2006, is closely related to M.mucogenicum. To our knowledge, no clinical cases were described so far. We describe hereby 4 cases of MPo bacteremia among pediatric hematology-oncology patients.

Methods: Cases with NTM bacteremia and clinical data were retrieved from hospital charts. Isolation of NTM was done using BACTEC 9240 and isolates identified by hsp65 and 16S rRNA genes sequencing.

Results: Between March 2011- October 2012, eight patients had NTM bacteremia. Four were from MPo. Ages were 3- 15.5 years. Primary diagnosis was leukemia, Burkitt, neuroblastoma and lymphoblastic lymphoma. CVC’s were inserted 14-63 days before bacteremia; duration of bacteremia was 1-15 days. Antibiotic treatment consisted of Meropenem, Clarithromycin and Ciprofloxacin. Lung CT scan was abnormal in 3/4 patients, mainly with ground glass appearance. All patients recovered. No positive blood culture was documented after removal of CVC. One patient died 2 months later from neuroblastoma.

Conclusion: MPo is an emerging RGM, may cause bacteremia in pediatric oncology patients with CVC as was previously described with other RGM. In our cases, possible pulmonary involvement was common. Removal of CVC seems important for clearance of bacteremia. More data is needed for the evaluation of the full pathogenic spectrum of these emerging pathogens.