

ISOLATION OF TWO MYCOBACTERIA SPECIES IN THE SAME SAMPLE: AN UNCOMMON FINDING

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Purpose of the study: The use of liquid media has been an advance, not only because it provides rapid information for diagnosis, but also because of its usefulness in susceptibility studies. In recent years, there has been an increase in the number of cases in which different mycobacterial species (even *M. tuberculosis* complex) are cultured from a single specimen. We think that liquid media has played an important role in the recovery of different mycobacteria species from the same clinical sample. The aim of this study was to review the cases in which more than one mycobacteria species were isolated during the last ten years.

Methods: From 1997 to 2006, we had 1,635 patients with tuberculosis or other mycobacteriosis, 28 of these had two isolates of different mycobacteria species from a same sample. Specimens were processed according to standardized procedures and cultured in both Lowenstein-Jensen-pyruvate (BD) and liquid medium (MGIT, BD). The isolates were identified by AccuProbe (GenProbe) and biochemical tests.

Results: *M. tuberculosis* complex was isolated together with other nontuberculous mycobacteria (NTM) in 21 of the 28 patients: *M. avium* complex (MAC) (14), *M. fortuitum* (5) and *M. kansasii* (2). In 80% of these cases, the NTM was recovered only from the liquid media. In the remaining patients (7) two different NTMs were cultured, and the most frequent combination was MAC (5) with other NTM species: *M. kansasii* (2), *M. fortuitum* (1), *M. gordonae* (1) and *M. simiae* (1). Finally, in the two remaining patients *M. gordonae* was isolated with *M. fortuitum*. In all the cases, the two species were recovered first in MGIT.

Conclusion: Since the introduction of MGIT as a routine diagnostic procedure in microbiology laboratories, the isolation of different mycobacteria species, mainly MAC, from the same specimen has increased, however its percentage remains low (0,02%). Studies assessing the clinical consequences of this finding are required.

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