

## MYCOBACTERIAL SPECIES DIVERSITY AT A GENERAL HOSPITAL ON THE ISLAND OF CRETE

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Purpose: To investigate the diversity of mycobacterial isolates in a general hospital in Crete, Greece.

Methods: Over a 3-year period (2003-2005), a total of 1277 clinical samples were cultured for mycobacteria at the "Agios Georgios" General Hospital of Chania (Chania, Crete, Greece). Samples were processed according to standard guidelines. All positive Lowenstein-Jensen (LJ) slants were stored in a dark environment at room temperature for a prolonged period of time. Differentiation to the species level was performed at the University Hospital of Heraklion (Heraklion, Greece) by means of AccuProbe (GenProbe, USA) along with the GenoType MTBC for members of the *M. tuberculosis* complex and the GenoType CM and GenoType AS (Hain Lifescience, Germany) for non-tuberculous mycobacteria (NTM). All assays were performed according to the manufacturers' instructions.

Results: Forty-eight positive cultures from different patients were obtained. Identification was completed in 43 of the 48 isolates. In five cases the results of the assays were either equivocal or we could not obtain any data. NTM comprised the majority of the isolates: 56.3% (27/48) vs 33.3% (16/48) of *M. tuberculosis*. Among NTM, *M. lentiflavum* was the predominant species isolated (9/27) followed by *M. kansasii* (7/27), *M. goodii* (6/27), *M. peregrinum* (2/27), *M. fortuitum* (1/27) and *M. chelonae* (1/27). There was one NTM that apart from bands 1, 2 and 3, presented positive bands 10 and 12 when the GenoType CM and AS were used respectively. No *M. avium* complex isolates were detected.

Conclusions: The predominance of NTM is an interesting feature of this study, whereas the international literature usually reports *M. tuberculosis* as the predominant species. The complete absence of *M. avium* was unexpected, since it is one of the most commonly encountered NTM worldwide. The fact that AIDS patients are referred to other hospitals with special facilities can partially explain the observation.