**MYCOBACTERIUM LENTIFLAVUM: HIGH ISOLATION RATES DURING ROUTINE TESTING**

F. Kontos, M.E. Barda, I. Marinou, K. Chatzigeorgiou, N. Siafakas, L. Zerva
Clinical Microbiology Laboratory, “Attikon” Hospital, Medical School of the University of Athens, Greece

**Purpose of the study:** In our recently established Mycobacteriology Laboratory, a high frequency of isolation of *M. lentiflavum* was observed. This study describes our preliminary findings.

**Methods:** During a 4-month period, 381 specimens from 258 patients were submitted for mycobacteriological testing. Specimens were stained with Ziehl-Neelsen and cultured using Bactec MGIT 960 (Becton Dickinson), Loewenstein- Jensen (L-J) slants and Bactec 9000 (Becton Dickinson). Isolates were identified with the Genotype Mycobacterium CM/AS (Hain-LIFESCIENCE), Accuprobe (Biomerieux), PCR-RFLP analysis of the *hsp65* gene and sequencing of a 1,502 bp fragment of the 16S rDNA gene.

**Results:** A total of 33 mycobacterial isolates (8.7% isolation rate) were recovered including 18 *M. tuberculosis* complex (MTBC), 12 *M. lentiflavum* and 3 *M. intracellulare* strains. The 18 MTBC strains originated from 7 patients and the 12 *M. lentiflavum* from the sputa of 8 patients (all smear-negatives) hospitalised in three wards (2 Internal Medicine and 1 Pulmonary Medicine Departments). Only in one case the isolation of *M. lentiflavum* could be considered as clinically significant, while the analysis of laboratory data excluded the possibility of a pseudo-outbreak due to laboratory contamination. An additional *M. lentiflavum* strain was isolated from hospital tap water. Of the 13 *M. lentiflavum* isolates, 8 grew only in MGIT, 1 only on L-J slants and 4 in both media. The mean time to detection was 30.5 days for MGIT and 53 days for L-J slants. All isolates were correctly speciated by the molecular identification methods and all produced an identical pattern with the PCR-RFLP analysis of the *hsp65* gene.

**Conclusions:** The high frequency of positive cultures for *M. lentiflavum* (36.4 % of all mycobacterial isolates) indicates a possible pseudo-outbreak in our hospital. This may originate from the hospital water and necessitates an extensive epidemiological investigation.