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Abstract (poster session)

Description and molecular epidemiology of 100 tuberculosis cases

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Objectives. To investigate for the first time, the molecular epidemiology of tuberculosis in Greece by a hospital-based study. **Methods.** Demographic and laboratory characteristics of 100 consecutive tuberculosis patients, who were diagnosed in the Laboratory of Clinical Microbiology (2007-2011) of “Attikon” Hospital in Athens, were recorded. The strains were genotyped using the Mycobacterial Interspersed Repetitive Units-Variable Number of Tandem Repeats (MIRU-VNTR) method by analyzing 24 polymorphic loci. **Results.** The majority of the patients (86%) originated from Attica. Most patients were Greek (72%) with a higher mean age (62.6 years, range 1-97) compared to the foreigners (28.8 years, range 0.5-42). However, 38% of Greeks were aged <60 years, and 5 patients were children (3 Albanians, 2 Greeks). Isolates were identified as *Mycobacterium bovis* (1 strain), *Mycobacterium bovis* BCG (1) and *Mycobacterium tuberculosis* (98). Resistance rates were isoniazid 6%, rifampin 1%, streptomycin 5%, ethambutol 1% and pyrazinamide 3%; only one strain was multidrug-resistant. MIRU-VNTR classified 55 isolates in 10 *Mycobacterium tuberculosis* families (most frequently Haarlem [18 strains], S [12], Delhi/CAS [9] and Beijing [8]), whereas the remaining 43 strains did not belong to a known family. The distribution of Greeks in these two subgroups was 45% and 55% respectively, whereas the distribution of the foreigners was 81% and 19% respectively. The genotypic analysis confirmed two suspected cases of intrafamilial transmission (6 patients in total, of which 4 were children). The remaining strains showed a unique genotype. **Conclusion.** Tuberculosis is still more frequently diagnosed in Greeks, and transmission within the community seems to continue. Commonly encountered *M. tuberculosis* families were identified, but Greek patients may be infected by unclassified strains, possibly “domestic” strains.