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## Characterization of clinical isolates of *Mycobacterium tuberculosis* from HIV positive individuals in Colombia, 2012

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One-third of the increase in tuberculosis cases is attributed to the spread of HIV. In 2012, 1,397 HIV-associated tuberculosis cases were reported in Colombia, i.e., 11.8% of the total cases. Molecular epidemiology tools help to understand the transmission of tuberculosis. The objective was to characterize clinical isolates of *Mycobacterium tuberculosis* derived from HIV-infected individuals, received at the Laboratorio Nacional de Referencia in the Instituto Nacional de Salud. This was a descriptive observational study. We analyzed 63 isolates of *M. tuberculosis* from HIV-infected individuals. Identification, drug susceptibility and genotyping assays were performed. The results show that the new cases which were evaluated, three (5.0%) were resistant to isoniazid combined with streptomycin; two (3.3%) to rifampicin, and one (1.6%) to isoniazid. Previously treated cases were sensitive. No multidrug resistance was evident. Among the predominant genotypes, 20 isolates were (31.7%) LAM9, eight (12.7%), H1 and seven (11.1%), T1. Nineteen isolates corresponded to orphan patterns. One single grouping was observed among tested isolates. We found no statistically significant difference between the proportions of the anti-tuberculosis drug resistance and genotypes. We found resistant isolates to the most powerful drugs, rifampicin and isoniazid, among new cases, showing the transmission of resistant strains. Genetic families of *M. tuberculosis* LAM9, T1 and H1 corresponded to those described in the general population. We detected no active transmission among studied isolates. More comprehensive studies are needed to assess the real situation of HIV associated tuberculosis in the country regarding sensitivity and transmission.

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