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Nosocomial Transmission of *Mycobacterium bovis*

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Since 1990, several nosocomial outbreaks of multidrug-resistant (MDR) TB occurred in the Madrid area, but none of them involved *M bovis.* Investigators from Spain have described an epidemic of nosocomial and primary MDR *M bovis* TB, from December 1993 to February 1995, among HIV-1–infected patients in a district of Madrid. They undertook genetic characterization of the *M bovis* strain and investigated its presence in a TB epidemic in a Madrid hospital in a case-controlled study. They assessed 19 cases diagnosed with MDR TB due to *M bovis* during the study period. For the control group, they randomly selected 33 patients with HIV-1 infection and isolation of a strain of *M tuberculosis* susceptible to isoniazid, rifampin, or both, who were treated in Ramon y Cajal Hospital. They detected 19 cases in HIV-1–infected patients with primary MDR TB produced by *M bovis* resistant to 11 antituberculosis drugs. They found phenotypic and genotypic similarities in the strains of *M bovis.* In the case group, the index case and two other cases had previous contact with another hospital that had an MDR TB outbreak. All patients died after a mean of 44 days (range, 2-116), despite multidrug treatment with first-line and second-line antituberculosis drugs. The cases with *M bovis* MDR tuberculosis were significantly more likely than controls to have been admitted to a hospital ward at the same time as patients already infected with MDR TB during the 10 months before their diagnosis, ($P<.0001$). Advanced HIV-1 immunosuppression was associated with the development of MDR TB.

The authors concluded that an *M bovis* primary MDR TB epidemic that cannot be treated effectively and with high mortality has emerged in Europe and has been transmitted between hospitals.

FROM: Guerrero A, Cobo J, Fortun J, Navas E, Quereda C, Asensio A, et al. Nosocomial transmission of *Mycobacterium bovis* resistant to 11 drugs in people with advanced HIV-1 infection. *Lancet* 1997;350(9093):1738-1742.

https://doi.org/10.1017/S0195941700087403 Published online by Cambridge University Press