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**ePoster Viewing**

**Tuberculosis and other mycobacterial infections**

### **Human tuberculosis caused by *Mycobacterium bovis* in Navarra (Spain) 2000-2014**

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**Background:** *M. bovis* can infect is capable of infecting a wide range of mammals, including humans. Zoonotic transmission occurs through close contact with infected cattle or consumption of contaminated animal products. Tuberculosis due to *M. bovis* is a rare infection in humans in the EU. During 2012, 125 confirmed human cases were reported by 9 European countries. Most cases were reported in Germany, the United Kingdom and Spain. *M. bovis* was also detected in EU in over 10 animal species other than cattle, including wildlife. The aim of this study is to describe the microbiologic and epidemiological features of human *M bovis* infection in Navarra (Spain) between 2000 and 2014.

**Material/methods:** Retrospective study of *M. bovis* isolated in a tertiary care hospital, that serves a population of 640,000 inhabitants in Navarra (Spain) between 2000 and 2014. The native and foreign terms are used to describe patients born in Spain or abroad. The average proportion of immigrants during the study period was 9% (1.7% in 2000, 10.2% in 2014).

**Results:** 16 strains of *M. bovis* were recovered, this represents 1.6% of all isolates of *M. tuberculosis* complex. The annual number of isolates ranged between 0 and 4. There were 2 cases from 2000 to 2004, 4 from 2005 to 2009 and 10 cases between 2010 and 2014. Five patients (31.2%) were foreigners (4 from Morocco and 1 from Nigeria). The average incidence in natives was 0.13 per 100,000/h and 0.64 in foreigners. 9 patients (56.2%) were male. The mean age was 52,7 years (6-89), 20,6 years in foreigners and 67,3 in natives. Six strains (37.5%) were isolated from respiratory samples and 10 (62.5%) in non-respiratory samples (4 lymphadenopathy, 2 biopsies, 1 pleural fluid, 1 ascites, 1 urine and 1 bone). Smear was performed on 12 samples of which 3 (25%) were positive. 3

strains from 15 tested (20%) were resistant to isoniazid and 1(6.7%) to rifampicin, the latter proved to be multiresistant. No resistance to ethambutol or streptomycin were detected.

**Conclusions:** Although a larger number of cases are native, the incidence of the disease in born abroad or born to immigrants is five times higher. Moreover all pediatric cases occurred in foreign population. The incidence in our study during 2010-2014 ranged 0,15-0,62/100.000h and is higher than that reported in Europe or Spain, both were 0,03/100.000h in 2012. The average age of patients is lower in the foreign population. Likely due to a recent zoonotic transmission, while native are older and the disease may be related to reactivation. Higher proportion of isolates in extrapulmonary samples as previously described by the microaerophilic nature of *M. bovis*.