

**P0978 Epidemiology of non-tuberculous mycobacteria in Madrid: a 5-year multi-centre study**

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**Background:** Recent reports have described the increasing importance of NTM infections, especially in patients with important underlying diseases (such as immunosuppression, cystic fibrosis and others). However, because the isolation of these organisms is not a compulsory matter, the actual knowledge of the epidemiology of these organisms is unknown. Here we report a multicenter study performed at the Comunidad de Madrid (CM, a 6-million community from Spain) during a 5 year period, aiming to know the actual importance of NTM in this setting.

**Materials/methods:** Clinical Microbiology Laboratories that attend 21 hospitals from CM participated in this study. Laboratory records between January 1<sup>st</sup> 2013 and 31<sup>nd</sup> December 2017 were retrospectively reviewed. Only 1 isolate of each species/patient was included. Data registered included age, sex, sample and species. During the study period culture methodology has not changed. Identification of the isolates was performed using commercial molecular biology systems, MALDI-ToF methodology and in some cases the strain was submitted to the National Microbiology Center. Tuberculosis (TBC) cases were also registered for comparison purposes.

**Results:** During the study period 6306 mycobacterial isolates were included: 4106 NTM and 2200 TBC. While TBC cases were stable throughout the study period, NTM were also stable between 2013-2016, but showed an increase of 143 cases between 2016-2017. 2127 NTM isolates were from respiratory samples (1693 sputum). 56 % were from women. *M. avium* complex represents almost half of NTM isolates, followed by Rapidly Growing Mycobacteria and *M. lentiflavum*. 63 species were identified. While most species showed a stable number of cases, some of them experimented an increase during the study period (Figure).

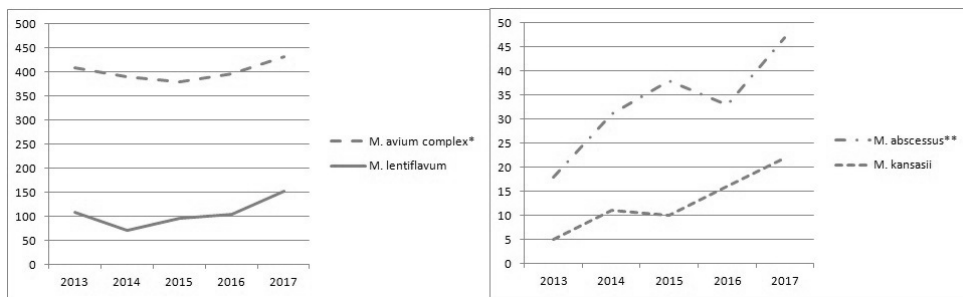


TABLE.jpg

Figure. Evolution of cases of *M. avium*, *M. lentiflavum*, *M. abscessus* and *M. kansasii*.

**Conclusions:** The number of TNM isolates doubles that of TBC. This number is increasing during the last year, especially because an increase in *M. avium* complex cases, as well as other species. *M. avium* complex is the most frequently isolated NTM during all the study period, followed by RGM and *M. lentiflavum*. The knowledge of NTM epidemiology needs more research in order to evaluate the clinical significance of the isolates.

