

### Background

The non-tuberculous micobacterias (NTM) are saprophytic and ubiquitous microorganisms. They can cause disease in susceptible individuals, especially in patients with previous pulmonary disease. The aim of the study is to describe the frequency of clinical isolations and risks factors from patients in a University Hospital.

### Materials and Methods

This is a retrospective cohort study that analysed TB and NTM patients enrolled in an on-going TB-Cohort Study in Fundación Valle del Lili, Cali, from 2011 to 2016. The NTM diagnosis was performed using solid and liquid cultures, Speed-oligo MTBC, and Genotype. The clinical samples were collected from different anatomic locations. Epidemiological and clinical data was collected from the Clinical Database

### Results

We evaluated data from 81 patients (9.5%) with NTM isolations from a database of 849 patients with NTM or TB. The median age was 46 years (interquartile range [IQR] 2-93), female patients were 50.6%, 93.8% lived in urban area, 19.7% were HIV-infected, 13.5% smokers and 4.9% had chronic obstructive pulmonary disease (COPD). The most frequent specimen isolated was the *Mycobacterium avium* complex (MAC) in 33.3%, followed by *M. fortuitum* 22.2%. 69.1% of the isolations came from pulmonary samples. 59.2% of all patients began empirical TB treatment, the rest of the patients were considered as colonization. The related mortality was 9.8%.

### Bibliografía

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### Resultados

Table 1. Demographical and Clinical Characteristics of NTM patients	n= 81 (%)
Age, median ±	46 ± 47
Female	41 (50.6)
Ethnic Group	
Mestizo	44 (54.3)
Afro-colombians	11 (13.5)
Whites	3 (3.7)
Urban area	76 (93.8)
HIV infected patients	16 (19.7)
COPD	4 (4.9)
Smoking	11 (13.5)
Autoimmune disease	13 (16.0)
Procedence of Clinical Samples	
Pulmonary	56 (69.1)
Skin	6 (7.4)
Blood	4 (4.9)
Cerebrospinal Fluid	4 (4.9)
Lymphadenopathy	3 (3.7)
Ascitic Fluid	3 (3.7)
Pleural Effusion	2 (2.4)
Bone	2 (2.4)
Urine	1 (1.2)
NTM species isolates	
<i>Mycobacterium avium</i> Complex	27 (33.3)
<i>Mycobacterium fortuitum</i>	18 (22.2)
<i>Mycobacterium gordonae</i>	13 (16.0)
<i>Mycobacterium abscessus</i>	7 (8.6)
<i>Mycobacterium kansasii</i>	7 (8.6)
<i>Mycobacterium chelonae</i>	2 (2.4)
<i>Mycobacterium spp.</i>	2 (2.4)
<i>Mycobacterium flavescens</i>	1 (1.2)
<i>Mycobacterium immunogenum</i>	1 (1.2)
<i>Mycobacterium interjectum</i>	1 (1.2)
<i>Mycobacterium malmoense</i>	1 (1.2)
<i>Mycobacterium simiae</i>	1 (1.2)
Empirical TB Treatment	48 (59.2)
Related mortality Rate	8 (9.8)

### Conclusions

In settings with middle prevalence of Tuberculosis, the NTM infections are an important cause of positive cultures for mycobacterium, conditioning the instauration of inadequate empirical TB treatment associated with high mortality rates. It is suggested to perform identification tests to all cultures positive for acid-alcohol resistant bacilli and implement rapid diagnostic tests in low and middle income countries.