

P1600 **Historical evolution of diseases caused by non-pigmented rapidly growing mycobacteria in a university hospital**

Marta García Coca¹, Nerea Carrasco Antón², Maria-Carmen Muñoz-Egea¹, Concepción Pérez-Jorge¹, Graciela Rodríguez Sevilla¹, Jaime Esteban-Moreno*¹

¹IIS-Fundacion Jimenez Diaz, Clinical Microbiology, Madrid, Spain, ²IIS-Fundacion Jimenez Diaz, Internal Medicine, Madrid, Spain

Background: Non-pigmented rapidly growing mycobacteria (NPRGM) are ubiquitous in nature. It has been observed an increasing importance of infections caused by these organisms, especially due to the high resistance to antibiotics. They can cause a wide spectrum of human infections.

The aim of this study is to describe the experience with clinical significance of NPRGM isolated in University Hospital during a period of 13 years.

Materials/methods: A retrospective study was performed in order to evaluate the clinical significance of the NPRGM between 2004-2017. Patients with at least one isolate of NPRGM were selected. Clinical charts were evaluated according to a predefined protocol. An isolate was considered clinically significant when the clinical findings were related with the organism, received antimicrobial therapy and multiple isolates were detected in respiratory samples.

Results: NPRGM growth was observed in 75 clinical samples of 57 patients. The isolated species were *Mycobacterium fortuitum* (30 patients), *Mycobacterium abscessus* (8) *Mycobacterium mucogenicum* complex (8) *Mycobacterium chelonae* (6), *Mycobacterium peregrinum* (4) and *Mycobacterium porcinum* (1). Isolates were detected from respiratory tract (40 patients), wound exudates and skin biopsies (4), urine (3), blood cultures (2) and others (8).

Clinically significant cases included 13 patients. These include respiratory tract infections (6), catheter-associated infections (2), skin and soft tissue infection (1), disseminated infections (1), conjunctivitis (1), prosthetic joint infection (1) and mastitis (1). 50% of the isolates of *M. chelonae*, 42.85% of *M. abscessus* and 23.33% of *M. fortuitum* were clinically significant. None of the isolates of other species were significant.

8 cases were treated with monotherapy (3 ciprofloxacin, 2 clarithromycin, 1 levofloxacin and 1 cotrimoxazole). In the implant-related infection it was necessary to remove the prosthesis in order to cure the infection. All the patients were cured after 1 year, except 3 cases that are currently being under follow-up. One patient died because other pathology.

Conclusions: NPRGM had clinical significance in 22.8% of patients. Most isolates in respiratory samples were contaminants/colonizations. *M. abscessus* was the main etiological agent in respiratory syndromes, whereas *M. chelonae* and *M. fortuitum* were more frequently associated with other infections.