S41 CLINICAL RELEVANCE OF PULMONARY NON-TUBERCULOUS MYCOBACTERIA ISOLATED OVER 7 YEARS AT A SINGLE UK CENTRE

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Background The frequency of clinical isolation of non-tuberculous mycobacteria (NTM) from the respiratory tract is increasing. American Thoracic Society (ATS) criteria aid the identification of clinically relevant isolates causing lung disease.

Objectives (1) to audit diagnostic criteria used when treating NTM at our hospital (2) to identify the most clinically relevant isolates in our region and (3) to identify relevant associated patient demographics and radiological features

Methods records of all patients from whom NTM were isolated from respiratory samples between 2007 and 2014 were reviewed. Microbiological results, radiological findings and symptoms were reviewed to assess adherence to ATS diagnostic criteria and outcomes.

Results NTM were isolated 826 times in 444 clinical episodes during the study period. Of 92 treated episodes, 81 (88%) met diagnostic criteria. If isolated, *M. abscessus* was most likely to be clinically relevant [Figure 1] and sputum smear positive. Isolation of *M. kansasii* and *M. malmoense* also warrant particular attention. Of the cases meeting ATS diagnostic criteria, the most common symptoms were fever, night sweats and weight loss. Concomitant oral steroid use and HIV positive status were common in this group. Cavitation and tree-in-bud were the most common CT radiographic appearances.

Discussion 21% of all clinical episodes with NTM isolation were treated for NTM disease. 88% of cases met ATS diagnostic criteria suggesting good adherence to guidance.

REFERENCE

- 1 Griffith DE, et al. An Official ATS/IDSA Statement: Diagnosis, Treatment, and Prevention of Nontuberculous Mycobacterial Diseases. *Am J Respir Crit Care Med* 2007;**175**:367–416.

S42 ERADICATION SUCCESS OF NON-TUBERCULOUS MYCOBACTERIAL INFECTIONS IN A PAEDIATRIC CYSTIC FIBROSIS POPULATION

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Introduction and objectives Non-tuberculous mycobacterial (NTM) infections are being increasingly identified within adult and paediatric Cystic Fibrosis (CF) populations. They present a diagnostic and management challenge, requiring intensive treatment regimens with little literature on eradication success within children. In this retrospective study we describe a cohort of paediatric CF patients with NTM infection, examine treatment duration and eradication.

Methods All new isolates of NTM during a five year period (2011–15) were identified at a single tertiary paediatric CF centre with a population of 450 children. Groups were separated into Mycobacterium abscessus complex (MABSC), Mycobacterium avium complex (MAC) and other mycobacterial infections (*M. kansasii*, *M. malmoense*). Data on demographics and NTM treatment were collected and analysed. Eradication is defined as 4 clear samples at a year after stopping treatment.

Abstract S41 Figure 1 Clinical relevance of Pulmonary NTM isolates