A CASE FOR SPECIALIST NON-TUBERCULOUS MYCOBACTERIUM PULMONARY DISEASE SERVICES: A RETROSPECTIVE STUDY ON CURRENT MANAGEMENT OF NON-TUBERCULOUS MYCOBACTERIUM PULMONARY DISEASE IN A REGIONAL TEACHING HOSPITAL

S Holland, J Moore, S Drazich-Taylor, P De Souza, R Phillips. Norfolk and Norwich University Hospital, Norwich, UK

10.1136/thorax-2023-BTSabstracts.243

Introduction Non-tuberculosis mycobacterial pulmonary disease (NTM-PD) commonly affects a frail, multi-comorbid population, and treatment involves extended courses of multi-antibiotic therapy with a vast side effect profile. Whilst specialist tuberculosis clinics are commonplace in most UK hospitals, NTM-PD patients are typically managed across various respiratory clinics. We present data on the management of NTM-PD in our centre over a six-year period and propose a case for a specialist NTM service with specialist nurse involvement to improve patient outcomes.

Methods We retrospectively collected data from 2016 to 2021 on patients with NTM isolated from sputum, bronchoalveolar lavage, pleural fluid or lung biopsy. Cystic fibrosis patients and patients under 18 years old were excluded. A broad range of data were collected, including microbiology, comorbidities, imaging, investigations, treatment and outcomes. We compared the management of patients seen in Specialist (tuberculosis or respiratory consultants) Clinics (SC) with patients in General Respiratory Clinic (GRC).

Results Between 2016 and 2021 we identified 459 positive pulmonary NTM cultures from 158 patients. Eight patients grew more than one NTM organism over the five-year period resulting in 170 cases total. ATS diagnostic criteria was met in 104 cases and 87 of these were clinically diagnosed with NTM-PD by respiratory consultants, with 17 probable contaminants. The average age of the NTM-PD patients was 68 years, 64.4% were female, and patients had an average of 2.8 comorbidities. Fifty-six patients started treatment. Of these, 33 were managed in a SC and 23 in a GRC. In the GRC group, only 4.5% of patients completed all required pre-treatment investigations compared with 40.6% in SC. HIV status was checked in 32.1% of GRC patients compared with 39.0% of SC patients. In the SC group, 78.8% of patients had contact with a specialist nurse compared to 26.1% in GRC. At the time of data collection 23 patient had completed treatment. Culture conversion was achieved in 25.0% of GRC patients compared to 53.3% in SC.

Conclusion Our data reflects the complexity of managing NTM-PD and demonstrates improved management when receiving care in specialist clinics, thus supporting our case for a specialist NTM service with specialist nurse involvement.

OUTCOMES OF NON-TUBERCULOUS MYCOBACTERIAL PULMONARY DISEASE IN AN EAST LONDON COHORT


Introduction Prevalence of non-tuberculosis mycobacterial pulmonary disease (NTM-PD) is increasing. The diagnosis and treatment of NTM-PD present challenges as long treatment regimens with multiple agents can induce intolerable side effects, especially in the elderly. Our primary aim was to compare mortality outcomes between NTM-PD patient groups with chronic obstructive pulmonary disease (COPD), bronchiectasis, both, or neither.

Methods This is a retrospective observational study including individuals aged 18 or over with NTM-PD according to the ATS definition of NTM-PD, and two or more positive NTM isolates in sputum, broncho-alveolar lavage or biopsy. Outcomes are defined according to the 2018 NTM-NET consensus statement.

Results We present outcome data on 59 individuals with NTM-PD treated at a tertiary centre. Out of 59 patients, 26 patients were male (44%). The median age was 69 years (IQR 56.5–77). Fourteen (24%) patients had a background of COPD, 22 (37%) patients had bronchiectasis, eight patients (14%) had both COPD and bronchiectasis, and 15 patients had neither. In the COPD group, four (29%) were smoking at the time of diagnosis, eight (57%) were ex-smokers and two (14%) never smoked. Two (14%) of the 14 patients with only COPD were of mild severity, five (36%) were moderate, three (21%) were severe and four (29%) were very severe. Thirty-seven patients (63%) of the total cohort had Mycobacterium avium complex, ten patients (17%) had Mycobacterium kansasii, nine patients (15%) had Mycobacterium abscessus and three patients (5%) had other mycobacteria.

During the six year period, the mortality rate in patients with COPD was 50% which was significantly higher (p<0.05) when compared to patients with bronchiectasis (9%), and patients with both COPD and bronchiectasis (25%). Of the patients who died, 57% had severe to very severe COPD. There was no mortality reported in patients who had neither COPD nor bronchiectasis. In nine patients (15%), treatment was discontinued due to side effects.

Conclusion This study confirms that the overall outcomes in patients with NTM-PD remains poor and patients with a background of COPD have a significantly higher mortality rate than patients with bronchiectasis.

Please refer to page A289 for declarations of interest related to this abstract.