

those sending samples, including surgeons and radiologists performing biopsies, so that specimens are sent correctly.

#### Abstract P59 Table 1 Results

	Pulmonary tuberculosis (N=36)	Extra-pulmonary tuberculosis (N=33)	Total (N=69)
Culture confirmed	29 (81%)	17 (52%)	46 (67%)
No growth on culture	4 (11%)	10 (30%)	14 (20%)
No sample obtained	3 (8%)	4 (12%)	7 (10%)
Sample obtained but not sent for culture	0	2 (6%)	2 (3%)

#### REFERENCE

1. Annual Report on tuberculosis surveillance in the UK 2009. Health Protection Agency. [http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1259152022594](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1259152022594).

#### P60 QUESTIONABLE UTILITY OF T-SPOT TESTING IN A TB EXPOSURE INCIDENT ON A CLINICAL HAEMATOLOGY UNIT

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**Introduction** Interferon-gamma release assays (IGRAs) have been promoted as having a key role in contact tracing for tuberculosis (TB). In immunosuppressed patients T-SPOT is considered to be the test of choice for detection of latent TB infection. We describe a contact tracing exercise carried out on a Clinical Haematology Unit (CHU) where 168 patients had significant nosocomial exposure to a case of smear-positive TB.

**Methods** A 29-year old female homeless patient with Hodgkin's lymphoma was diagnosed with smear positive pulmonary tuberculosis (TB). In the 6 months prior to diagnosis she had attended the CHU on 31 occasions including several prolonged inpatient stays. The Incident Management Team initiated a retrospective exercise to identify those at risk in this vulnerable population.

**Results** 485 haematology patients were subdivided into three cohorts of risk, as well as 69 significant staff contacts. 168 patients considered at highest risk were contact traced and offered screening. 149 of these 168 patients underwent T-SPOT testing. 11 patients did not attend and six patients had died from their underlying condition. In two patients it was not performed as they were already receiving anti-TB therapy. One of these patients had no other known exposure prior to the index case. Of the 149 patients tested with T-SPOT, 19 (12.8%) had a positive result, 76 (51.0%) had a negative result, and 54 (36.2%) had an indeterminate result (negative result with a failed positive control). All those with positive and indeterminate results were followed up in clinic. No further cases of TB were identified. Due to the large number of indeterminate results further T-SPOT testing of additional cohorts was not conducted.

**Conclusions** T-SPOT testing is considered to have superior sensitivity to tuberculin skin testing in certain immunosuppressed populations, where indeterminate T-SPOT test results have been reported to be infrequent. However, the number of indeterminate results in our study was significantly higher than previously reported in other immunosuppressed groups. This episode calls into question the stated utility of T-SPOT testing in this cohort of patients with haematological conditions. More research is required on the efficacy of IGRAs in the severely immunosuppressed.

#### P61 PULMONARY NONTUBERCULOUS MYCOBACTERIAL (NTM) CULTURE IS COMMON FOLLOWING LUNG TRANSPLANTATION, AND NTM LUNG DISEASE IS ASSOCIATED WITH POOR PROGNOSIS

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**Introduction** NTM lung disease (NTMLD) is commonly associated with advanced pre-existing lung disease or defective cellular immunity. Lung transplant (LTx) recipients receive potent immunosuppression and often have structural lung abnormalities, so might be at uniquely high risk of NTM infection and disease. However, there is little published about NTM following LTx.

**Method** We carried out a retrospective study of NTM in LTx recipients attending our centre between 1/1/2005 and 31/8/2009. NTMLD was diagnosed according to American Thoracic Society (ATS) guidelines.

**Results** 326 respiratory samples (from 172 LTx recipients) were sent for mycobacterial culture, of which 51 samples (15.6%) from 39 patients (22.6%) grew NTM. Samples from 32 patients (82%) grew *M avium* complex (MAC), three grew *M abscessus*, two *M goodii*, one *M kansasii* and one *M malmoense*. Nine patients had multiple positive cultures (maximum four), but only one species was ever isolated from each individual. None had NTM preoperatively, although one had a single isolate of NTM before the study period. 23 patients had positive culture from BAL or multiple sputum samples, and 21 patients had chest radiology compatible with NTM. ATS radiological and microbiological criteria were met in 13 patients (33%). Those diagnosed with NTMLD according to ATS guidelines had a significantly higher death rate than those from whom no NTM were isolated (HR 2.42, 95% CI 1.09 to 5.37), whereas those who did not meet ATS criteria did not. Four patients were treated for NTM: one was cured, while two deteriorated and died. The fourth developed renal impairment and treatment was abandoned; symptoms and lung function improved.

**Comment** In our cohort, respiratory NTM were cultured more frequently than previously reported, but a smaller proportion met ATS criteria for NTMLD and fewer were treated than in a previous cohort (15.6%, 33% and 10% respectively, compared with 6.5%, 73% and 82%). MAC is consistently the most common isolate. Patients with NTMLD by ATS criteria do worse than those without. Our data suggest that LTx is likely to be a risk factor for NTM infection but the majority of isolates represent colonisation/contamination. We advocate following ATS guidelines for treatment decisions of NTMLD after LTx.

#### P62 ARE WE MISSING OPPORTUNITIES TO OBTAIN A MICROBIOLOGICAL DIAGNOSIS OF TB?

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**Introduction** TB incidence is rising in the UK, with drug resistance becoming increasingly problematic. Diagnosis with microbiological culture and confirmation of sensitivity is therefore vital. This study investigated how often we are not achieving microbiological diagnosis at our centre, what factors influence this and whether opportunities to obtain microbiological samples were missed.

**Methods** A retrospective study of all 156 cases (adult and paediatric) diagnosed with TB at Central Manchester Teaching Hospitals in 2009 was carried out. Demographic details, site of disease, types of specimens and results of TB culture were recorded. Cases where