recurrence patients had mean age = 42 yrs (range 18–83 yrs) and 6 were males. The sites of relapse were: pulmonary in 6 cases, 3 patients had intracranial tuberculomas, 2 patients had bony TB, 3 patients had TB lymphadenitis. The mean time to relapse/recurrence was 41 months (range 2–96 mo). All 14 patients responded favourably to re-treatment.

The true relapse rate of TB treated at the centre was 0.4%. The age, gender and ethnicity of the relapse cases were similar to the overall TB case-mix.

COnclusions Our true relapse/recurrence rate of TB is very low, and had no obvious risk factors. We cannot determine retrospectively whether these were recurrence or reinfection, but strain typing (DNA fingerprinting) could differentiate these.

M42 INCREASING COMPLEXITY OF TREATING TB IN OLDER PATIENTS

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10.1136/thoraxjnl-2014-206260.430

Introduction Older adults remain an important reservoir of tuberculosis (TB) infection in the UK. Waning cellular immune responses, more frequent co-morbidities such as diabetes and malignancy, and increased polypharmacy may all modulate clinical presentation, treatment tolerability and ultimately outcomes when compared to younger individuals with TB. We sought to investigate this in our population.

Methods Retrospective study of all adults over 60 diagnosed with TB during a five year period at one hospital trust. Case-note and electronic record review established baseline disease features, co-morbidities, pre-morbid immune suppression including HIV status, TB-related outcomes and death. A randomly selected control group of identical size, containing adults aged 16–59 who were treated for TB during the same period, was used for comparison.

Results Forty-eight cases aged >60 years at TB diagnosis were identified. The case and control groups are described in the Table. Multi-lobar pulmonary disease was significantly more common in the >60 year old, as was diabetes, other significant co-morbidities and non-HIV immune suppression. Whilst treatment regimen discontinuation or alteration was more common in the >60 year old group (7 (14%) versus 3 (6%) if 60 years old but none (0%) of the younger group; whilst deaths after completion of TB treatment have been observed in 8 (17%) and 1 (2%) of cases respectively (no post-treatment death was related to TB in either group).

Abstract M42 Table 1

	<60 years old (n = 48)	>60 years old (n = 48)	
Mean age at diagnosis (range)	34 (16–57years)	71 (60–88 years)	
Male	24 (54%)	33 (69%)	
Pulmonary disease	34 (70%)	33 (69%)	
- multi-lobar	9 (26%)	17 (52%)	p = 0.046
Culture-confirmed TB	38 (79%)	36 (75%)	
HIV-infected	6 (13%)	0	p = 0.026
Diabetes	0	13 (27%)	p < 0.01
Significant immune suppression	8 (17%)	29 (60%)	p < 0.01
Significant co-morbidities	14 (35%)	36 (75%)	p < 0.01

Conclusions Our observations of older patients presenting with more extensive pulmonary disease, increased pre-diagnosis immune suppression and co-morbidities, as well as more frequent TB-related deaths and TB-regimen alterations, suggest that this group of TB patients are frequently in need of more intensive support during treatment than their younger counterparts. However if treatment can be tolerated and completed than TB outcomes do not appear to be affected by age.

M43 THE ACCURACY OF CLINICAL TB DIAGNOSES IN CULTURE NEGATIVE PATIENTS

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10.1136/thoraxjnl-2014-206260.431

Background NICE guidelines for TB diagnosis recommend that sputum is obtained for culture for all suspected cases of pulmonary TB, and biopsies for all cases extrapulmonary TB. As results can take 6 weeks, treatment initiation decisions are frequently made without microbiological confirmation.

Aim This study set out to examine the accuracy of clinical diagnoses in a high incidence area, and the basis for these decisions.

Methods The data entered onto the national TB database was used to obtain a list of patients for whom no culture results had been recorded. Clinic letters, laboratory records and imaging were examined to determine whether samples had been sent for culture, how diagnoses were made in the event of negative results, and if alternative diagnoses were concluded.

Results Of 323 patients on the database, 7% had no samples sent for culture. There were 109 culture negative patients, of whom 13 (4% all cases) had alternative diagnoses. A combination of relevant history and imaging was the most commonly used method of diagnosis when culture was negative (47%). Histology was used in 17% patients and Mantoux or IGRA testing supported initiating treatment in 39% cases. The database was missing positive culture results for 102 patients, of which four were MDR TB.

Conclusions In this study, we found accurate initial clinical diagnoses, with only 4% patients subsequently obtaining alternative diagnoses. Most diagnoses were made on the basis of relevant history and imaging. Of concern are the 7% patients for whom tissue was never sent for culture. This is likely to be an underestimate when including all patients initially suspected of TB, raising the possibility of missed diagnoses. The utility of Mantoux and IGRA testing in active disease is now disputed. It is hoped with inter-specialty education regarding the importance of culture and futility of immunological based assays, the proportion of patients with suspected TB who have sputum or tissue sent for culture increases. Accurate recording of MDR-TB on the national TB database needs to be improved, to enable efficient monitoring of intervention programmes.

COPD: co-morbidities, deficiencies and interventions

M137 CAN STEROID INSENSITIVITY IN COPD PATIENTS BE RESTORED USING VITAMIN D?

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10.1136/thoraxjnl-2014-206260.432