Conclusion These results question the validity of following up LTBI patients at 3 and 12 months after diagnosis. Further longitudinal studies are needed to determine the optimum intervals for follow-up.

REFERENCE

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P19 GENEXPERT MTB.RIF ASSAY IMPROVES THE DIAGNOSTIC YIELD OF EBUS-TBNA IN SMEAR-NEGATIVE INTRA-THORACIC TUBERCULOUS LYMPHADENOPATHY

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Introduction and Objectives Tuberculosis notifications in the UK continue to rise and the diagnosis of both disease and drug resistance can be challenging. Endobronchial ultrasound (EBUS) and EBUS-guided transbronchial nodal aspirates (TBNA) have been shown recently to be a safe and effective tool in the diagnosis of intra-thoracic TB lymphadenopathy. New molecular techniques, notably the GeneXpert MTB.Rif system (Cepheid) have shown great promise in the diagnosis of pulmonary disease but have not been evaluated in intra-thoracic nodal disease.

Methods As part of an ongoing study, consecutive patients with intra-thoracic lymphadenopathy were prospectively studied within our tertiary EBUS service between January 2010 and March 2011. In addition to standard cytological and micro-biological investigations, a single GeneXpert MTB.Rif assay was performed on EBUS-TBNA samples. Using established methods, a final diagnosis was given of definite/highly probable TB, possible TB or not TB/alternative diagnosis. Performance of the GeneXpert MTB.Rif assay was then evaluated in the context of these final diagnoses.

Results 74 patients (3 HIV-positive) underwent EBUS-TBNA sampling. Nineteen have been diagnosed with definite/highly probable TB to date. A single GeneXpert assay had a sensitivity of 67% (8/12) from culture-positive TBNA. 11/15 (73%) of patients with a positive culture from any tissue and 13/19 (68%) patients classed as definite/highly probable TB had positive GeneXpert results. One case of confirmed MDR-TB was correctly identified and treatment started promptly. Fifteen patients had positive GeneXpert MTB.Rif results from EBUS-TBNA: 13/15 were given immediate TB treatment. One of the remaining two cases without strong microbiological or cytological findings was subsequently diagnosed with active tuberculosis supported by evidence of PET-positive mediastinal lymph nodes. The other case appears not to have active disease and remains under follow-up.

Conclusions A single GeneXpert MTB.Rif assay has good sensitivity in the context of culture-positive intra-thoracic tuberculous lymphadenopathy and can provide an immediate diagnosis of likely MDR-TB. Positive PCR results were seen in two patients where conventional techniques were inconclusive and in one provided the main support for the diagnosis. These results suggest the addition of the GeneXpert MTB.Rif assay to the investigation of intra-thoracic nodal disease improves diagnostic yield.

Sleep: clinical studies

P20 IMPACT OF PATIENTS' PERCEPTION OF PROBLEM DRIVING, SYMPTOMS AND SEVERITY OF OBSTRUCTIVE SLEEP APNOEA SYNDROME (OSAS) ON OUTCOMES ON AN ADVANCED OFFICE BASED DRIVING SIMULATOR

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Introduction Currently advice about an OSAS patient's fitness to drive is based upon the severity of the condition, with or without objective measure of daytime sleepiness and their account of their driving. Although there is a trend towards increased likelihood of accidents with more severe OSAS, this is not sufficiently robust data. There are conflicting data about the relationship between perceived sleepiness and the likelihood of being involved in an accident. Recently we have established that it is possible to identify with high degree of certainty a group of OSAS sufferers who perform significantly worse than others using specific simulator parameters on an advanced office based driving simulator (miniSim). We now explore the impact of patients' perception of problem driving, demographic, clinical, and polysomnographic characteristics on the outcomes of the simulator test.

Methods 133 (52±10 yrs, ESS 12±5, AHI 29±21) patients completed a detailed driving related questionnaire and performed a 90 km motorway driving scenario on the miniSim. Two events were programmed to trigger evasive actions, one subtle (Veer event) where an alert driver should not crash, while with the other (Brake event) even a fully alert driver might crash. There were three possible outcomes of the simulator runs; "fail", "indeterminate" and "pass". The questionnaire responses, demographic, clinical and polysomnographic characteristics were compared between the three outcome categories using one way ANOVA. Logistic regression was performed to explore whether a "fail" could be predicted from any of these data.

Results The results of one way ANOVA are described in Abstract P20 table 1. Patients who fail the simulator test tend to report more sleepiness while driving with a higher ESS & ODI. They also have more, but statistically insignificant, near misses and history of accidents. None of this information could predict a "fail" accurately in the logistic regression analysis.

Abstract P20 Table 1 Distribution and outcomes of one way ANOVA of clinical parameters and scores for questionnaire categories

	Fail (n=32) Mean (SD)	Indeterminate (n=47) Mean (SD)	Pass (n=54) Mean (SD)	One way ANOVA p Value
Clinical parameters				
Age (yrs)	50 (11)	50 (10)	55 (10)	0.05
BMI (kg/m^2)	34 (6)	35 (8)	34 (5)	0.33
ESS	13 (6)	12 (5)	10 (5)	**0.03**
AHI (events/h)	34 (24)	30 (23)	25 (16)	0.2
ODI (events/h)	39 (27)	35 (28)	23 (15)	**0.01**
Scores for different questionnaire categories				
Sleepiness while driving	12 (11)	7 (8.5)	7 (8.3)	**0.03**
Nods/rumble	1.22 (1.47)	0.78 (1.19)	0.77 (1.34)	0.27
Accidents/near misses	0.75 (1.39)	0.78 (1.69)	0.46 (0.86)	0.42
Coping strategies	7.1 (4.3)	6.7 (4.9)	6.6 (4.5)	0.69

AHI, Apnoea Hypopnoea Index; BMI, Body Mass Index; ESS, Epworth Sleepiness Score; ODI, Oxygen Desaturation Index.

Conclusions These data confirm that patients' accounts and perception of their own driving and the severity of their OSAS may

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