resolution, two remain under the infertility team and one has ongoing abdominal pain. Median treatment duration was six months.

Conclusion This case series highlights the delay in diagnosis and the significant morbidity – particularly infertility – experienced by patients with genital TB. Samples were frequently not sent for culture. Raising awareness of TB within obstetrics and gynaecology and highlighting the importance of considering TB in patients from high incidence countries may help reduce diagnostic delay for these women.

## P185

## IMPROVING THE ACCURACY OF MICROBIOLOGICAL DIAGNOSIS OF TB LYMPHADENITIS – IS A MULTIDISCIPLINARY APPROACH NECESSARY?

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Introduction The gold standard for diagnosing tuberculosis (TB) is from culture of the organism from fluid or tissue. Histological analysis of surgical specimens is well-established, but microbiological analysis is less frequent. Our trust serves a population with a high incidence of TB. Therefore, patients who present with lymphadenopathy should always be considered for a diagnosis of TB and all specimens sent for microbiological and histological diagnosis.

Methods A retrospective analysis was undertaken of all patients diagnosed with TB lymphadenitis between 2009–2013 using the London TB Register (LTBR), case notes and laboratory data to identify the proportion diagnosed with microbiology data compared with histology data.

Results 324 patients were diagnosed with TB lymphadenitis from LTBR, of which 73% (235/324) had lymph node (LN) specimens taken for microbiological or histological diagnosis.

233 patients had extrathoracic disease alone, of which 62% (144/233) had LN tissue sent for microbiology with 74% yielding a positive culture. 75 patients had intrathoracic disease, of which 31% (23/75) had LN tissue sent for microbiology with 52% yielding a positive culture. In both groups, a greater percentage of LN tissue was sent for histo-cytological analysis than microbiology (see figure).

75% (12/16) of patients with combined extrathoracic and intrathoracic disease had specimens sent for microbiology. 83%

**Abstract P185 Table 1** Table demonstrating numbers of patients with TB lymphadenitis having lymph node samples sent for microbiological or histological analysis and diagnostic yield

2009 - 2013	Number & Percentage of samples sent for culture			Number & Percentage of samples with positive culture		
	M	M	H	M	M	H
	NLN	LN	LN	NLN	LN	LN
Combined	25%	75%	81%	25%	83%	62%
	(4/16)	(12/16)	(13/16)	(1/4)	(10/12)	(8/13)
Intrathoracic	28%	31%	45%	14%	52%	44%
	(21/75)	(23/75)	(34/75)	(3/21)	(12/23)	(15/34)
Extrathoracic	11%	62%	71%	36%	74%	62%
	(25/233)	(144/233)	(165/233)	(9/25)	(106/144)	(103/165)

M = Microbiology H = Histology LN = Lymph Node NIN = Non Lymph Node (11/16) gained a positive microbiological diagnosis from lymph node sampling.

Conclusion Microbiological specimens were more likely to be sent in patients with extrathoracic disease compared to those with intrathoracic disease. This may partly be explained by the fact that all intrathoracic lymph node sampling during this study period was undertaken at other centres, mostly through referrals from the lung cancer MDT. Therefore TB may not have been considered as a possible diagnosis.

However, a significant proportion of surgical samples taken locally did not have microbiology specimens sent, which potentially may have impacted on treatment outcomes.

This review highlights that more education should be undertaken locally with surgical and radiology departments and the lung MDT, emphasising the need for all lymph node specimens to be sent for both microbiological and histological analysis.

## P186

## INTRATHORACIC LYMPH NODE TUBERCULOSIS – A COMPREHENSIVE CLINICAL DESCRIPTION

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Background Intrathoracic lymph node tuberculosis (ITLNTB) is an extra-pulmonary manifestation of tuberculosis (TB) and a predominant feature of primary TB in children. Historical literature supports the key role of lymph nodes in tuberculosis pathogenesis yet there is a paucity of literature describing ITLNTB in adults.

Methods This study comprehensively reviewed the clinical, radiological and pathological features of ITLNTB from 2009–2012 at a busy urban tuberculosis clinic.

Results 113 adult patients with ITLNTB were identified between 2009–2012. Patients were usually male, with a mean age of  $41.5 \pm 15.8$  years and mostly from White, Black-African or Indian ethnic groups. 86% were non-UK born and most presented within 5–10 years of entering the country. 43% were asymptomatic. A subgroup of patients who were mycobacterial culture positive on endobronchial ultrasound sampling (EBUS) of intrathoracic lymph nodes were identified as patients with definite mycobacterial infection of the lymph nodes (n = 27).

Comparisons between symptomatic and asymptomatic groups in the whole cohort and EBUS culture positive subgroup demonstrated significant associations between symptoms and disease dissemination (p = 0.0002 and p = 0.01 respectively); and symptoms and cytological response in the lymph nodes (p = 0.02 and p = 0.01 respectively), suggesting the presence of a spectrum of disease reflected in congruent clinical and pathological responses (Table 1). Comparisons between disease sites affected also showed a significant association between host response in the lymph nodes and disease dissemination (p = 0.006).

The presence of radiological necrosis, number of affected nodal stations, and largest node size were significantly greater in symptomatic patients in the whole cohort; with a similar trend observed in the EBUS culture positive subgroup.

In the EBUS culture positive subgroup, asymptomatic patients were identified significantly earlier following entry to the UK (p = 0.01).

Discussion This study provides the first comprehensive clinical description of ITLNTB in adults. There is a spectrum of disease