endemic rates of TB are we under using investigations to gain tissues samples in suspected cases?

Method We undertook a retrospective analysis of 46 cases coded as abdominal tuberculosis from our local hospital register. Data was collected from case notes and computer systems regarding pathology and radiology results.

Results The majority of patients were born in the Indian subcontinent: India 39%, Pakistan 20% and Bangladesh 8%. More than half the patients had lived in the UK for less than 5 years. 54% of patients had symptoms for 1–4 months before presentation. None of the cases had TB in the past and 13% could recall possible TB contact.

67% of CXR was normal, and of those who had abnormal films, only 4 cases had features that were specific for TB. Focused imaging taken included: CT abdomen 77%, US abdomen 18%, MR abdomen 1%, Barium follow through 5%.

48% of patients had procedures to obtain histological and microbiological results, including laparoscopy, laparotomy, colonoscopy, gastroscopy or ascitic tap. 26% of patients underwent laparoscopy. Of the remaining patients, 18% obtained microbiological samples from alternative sites. Thus, 42% patients were treated on clinical symptoms and radiological image findings alone.

Discussion Laparoscopy has been regarded as the gold standard and diagnostic investigation of choice in the management of abdominal TB[1, 2]. In our cohort 26% underwent laparoscopy. The reason for this unclear but could be due perceived risk with the procedure, lack of availability of service or in many cases is used as a last resort. In TB endemic areas, we suggest the development of an acceptable evidence based investigational pathway incorporating our surgical and gastrointestinal colleagues leading to more prompt and through management of abdominal tuberculosis.

REFERENCES

1. McLaughlin S, Jones T, Pitcher M, Evans P. Laparoscopic diagnosis of abdominal tuberculosis. *Aust NZ J Surg* 1998;68: 599–601
2. Rai S, Thomas W M. Diagnosis of abdominal tuberculosis: the importance of laparoscopy. *J R Soc Med*. 2003 December; 96(12): 586–588.

P31 ASSESSING THE EFFECTIVENESS OF TUBERCULOSIS (TB) SCREENING IN NEW ENTRANT HEALTHCARE WORKERS USING DIFFERENT TIME CUT-OFFS TO DEFINE HIGH RISK INDIVIDUALS

R Morton, K Bintley, Z Alexander, V Kahr; *Epsom and St Helier University Hospitals NHS Trust, London, UK*

10.1136/thoraxjnl-2013-204457.181

Introduction and Objectives NICE (2011) and the Department of Health (2007) provide guidance for occupational health departments for TB clearance in healthcare workers. Previous work from the London Consortium of Occupational Health Providers (LCOHPS) shows a marked variation in practice, notably in the criteria for defining high risk individuals. The length of time in the UK for an individual from a high TB endemic area (defined as an incidence of 40 per 100,000 or greater) to be considered as low risk ranges from 6 months to >5 years. We performed a retrospective study of new trust employees to see if changing the definition of a high risk individual would impact on the effectiveness of our screening programme.

Methods We performed a retrospective study of 40 new employees at our trust between 2008 and 2012. Cases were selected on the basis of a positive QuantiFERON-TB Gold test at occupational health screening. Demographic data, including date of UK entry, were collected and analysed.

Results Results are summarised in Table 1.

Conclusions Changing the definition of a high risk individual by reducing the cut-off time since entry to the UK may have both financial and time-saving consequences. However, our data show that a significant proportion of healthcare workers with latent TB infection, and in some cases active TB infection, would be missed by reducing the cut-off to 1 year. Screening of healthcare workers is an important aspect in the prevention and control of TB. Reducing the effectiveness of this screening exposes patients to increased risk. In view of these data, we would not recommend reducing the cut-off time for the definition of a high risk individual to less than 5 years.

Abstract P31 Table 1. Results

Time since entry to the UK (years)	Number of individuals (%)	Treatment received	
		Latent prophylaxis	Active TB treatment
<1	11 (27%)	11	0
1–5	22 (55%)	18	2
>5	7 (18%)	6	1

P32 WHEN A TEST IS NEITHER POSITIVE NOR NEGATIVE: THE IMPACT OF EQUIVOCAL AND INDETERMINATE QUANTIFERON TB IGRA IN A UK POPULATION

[1]P Saunders, [2]J Reading, [1]J Harvey, [3]S Murthy, [3]S Capocci, [1]S Hopkins, [1]S Seneviratne, [1]I Cropley, [1]M Lipman; *[1]Royal Free London NHS Foundation Trust, London, United Kingdom; [2]University College London Medical School, London, United Kingdom; [3]University College London, London, United Kingdom*

10.1136/thoraxjnl-2013-204457.182

Introduction For the diagnosis of latent tuberculosis (LTBI), clinicians like interferon-gamma based assays (IGRA) to be either positive or negative. Tests can be indeterminate (failure of the positive or negative control); and recently an equivocal category has been introduced for QuantiFERON IGRA results that lie around the positive cut off, 0.35 IU/mL, covering the range 0.2–0.7 IU/mL. Within our hospital, it is recommended that indeterminate or equivocal results are initially repeated by the requesting clinician. We report our outcomes from March 2010, when the equivocal category was introduced.

Methods Hospital pathology and clinical records were data-mined. Cost analysis used local NHS costs.

Results Tests for 1964 individuals were processed (over one-third from Occupational Health, and another one-third pre-biological therapy). 92% of subjects had a definitive first result, with 6% (116) equivocal and 2% (42) indeterminate (Table 1). 60% of equivocal tests were below the positive cut off of 0.35. The demographics of those with an equivocal result were broadly comparable with the whole tested population.

Almost half of the **equivocal** tests were not repeated (Table 1). 45% of repeats were negative and one-third still equivocal. 12 of 34 subjects referred to the TB service were treated for LTBI–10 with a positive IGRA on re-testing. One other patient with an initial equivocal test developed active TB during follow up.

43% of people with an **indeterminate** result had no repeat test (Table 1). 1 of 6 subjects referred to the TB service following an indeterminate IGRA received LTBI treatment.