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P8 EPIDEMIOLOGY OF TUBERCULOSIS IN NORFOLK

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The incidence of tuberculosis in England has shown a year-on-year decline over the past four years. The main burden of disease has been concentrated in larger urban areas. The East of England is an area of low prevalence and in 2015, had the lowest rate of TB cases notified per 1 00 000 people (6.2). London, the West Midlands and the North-West had the highest rates in the country. The population demographic of Norfolk shows a variation when compared to the rest of England. In 2011, 21.4% of Norfolk's population was aged 65 or over compared with 16.5% in England. Similarly, 94.3% of people in Norfolk were identified as white compared to 87.5% in England.¹ We hypothesised that these differences would be reflected in the demographics of patients treated for Tuberculosis at the Norfolk and Norwich University Hospital (NNUH). We analysed data over a 3 year period between 2014 and 2016. While most patients were diagnosed and treated locally, patients had been diagnosed elsewhere and moved to the local area after commencing treatment. One patient moved abroad following diagnosis. Our incidence of Tuberculosis was significantly lower than the national rate. Forty-six patients were diagnosed with TB in the 3 year period. This equates to 2.47 new cases per 1 00 000 people compared to 10.5 per 1 00 000 nationally in 2015. Four cases were Isoniazid resistant (8.7% compared to 6.9% nationally). There was one case of multi drug-resistant TB. Fourteen cases did not have microbiological cultures. In our patient group, 67.3% were born outside the UK compared to 72.5% nationally. Twenty-one of the twenty-three patients aged less than 40 were born abroad. However, all of the seven patients 65 and above were UK-born. Additionally, of the twenty patients with extra-pulmonary disease (with or without pulmonary involvement), only two were born within the UK. These trends are similar to those seen nationally. Furthermore, the incidence of TB locally peaked in the 25–29 age group reflecting national figures.² Our analysis shows that contrary to our hypothesis, there is no significant difference in the TB population in a low-incidence area compared to high-incidence areas.

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P9 IMPACT OF THE 2016 TUBERCULOSIS GUIDELINE ON A SINGLE PAEDIATRIC TB CENTRE IN THE UK

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Background NICE released an updated Tuberculosis (TB) guideline in January 2016. Compared with the 2011 guideline

this reduced the Mantoux threshold from 15 mm to 5 mm irrespective of BCG status, thus increasing the number of patients requiring assessment for latent TB infection (LTBI) and TB disease. In 2015 we predicted a paediatric workload increase of 37%.¹

Objectives To determine the impact of the 2016 guideline on the number of children diagnosed with LTBI and TB disease.

Methods A retrospective analysis of children aged <16 years attending our TB service January-December 2016. All children were assessed by a TB nurse followed by a consultant if there were concerns about LTBI or TB disease. Management followed 2016 NICE guidelines. Treatment given was then compared with that recommended in the 2011 guidelines.

Results 411 children were seen by the TB nurse. Of these, 294/411 fulfilled the 2016 criteria for screening (new entrants and pulmonary contacts). 50/294 (17%) had a positive Mantoux. Based on Mantoux Results 40/294 (14%) were diagnosed with LTBI. 9/294 (3%) had TB disease. Following the 2011 guideline 22/294 (7%) had a positive Mantoux with 16/294 (5%) treated for LTBI and 6/294 (2%) for TB disease. Of those with positive Mantoux tests, IGRA tests were positive in 20/40 (50%) and 14/22 (64%) of the 2011 and 2016 guideline groups respectively (Table 1). 43 additional children (household contacts of non-pulmonary disease) would have been screened by the 2011 but not the 2016 guideline. These children were seen in our clinic. None had TB disease but 8 had Mantoux ≥ 5 mm (1 IGRA positive).

Conclusion Compared with the 2011 version, the NICE 2016 TB guideline more than doubles the number of children receiving chemoprophylaxis for LTBI but identifies 33% more children with TB disease. Not screening household contacts of non-pulmonary cases Results in a 14.6% reduction in referrals but also misses a significant number of children with a positive mantoux.

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Abstract P9 Table 1 Number of patients referred for contact tracing or new entrant screening by mantoux test results and TB disease status

Guideline	Mantoux	LTBI	TB disease	No LTBI or TB disease	Total
2011	Positive	16	6	0	22
	Negative	33	4	235	272
2016	Positive	40	9	1	50
	Negative	9	1	234	244

P10 THE ROLE OF FDG-PET CT IMAGING IN OCULAR TUBERCULOSIS

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Ocular tuberculosis (OTB) remains a presumptive clinical diagnosis, based on indicative ophthalmic features and prior exposure to TB. Ocular sampling is unhelpful, so the diagnosis is supported by evidence of subclinical TB remote to the eye