

P97 **MULTI-DRUG RESISTANT TUBERCULOSIS: THE FIRST UK GUIDELINE FOR TREATMENT MONITORING**

¹JL Keal, ²TG Capstick, ¹WM Ricketts, ³N Whitehead, ⁴OM Kon; ¹Barts Health NHS Trust, London, United Kingdom; ²Leeds Teaching Hospitals NHS Trust, Leeds, United Kingdom; ³Queen Alexandra Hospital, Portsmouth, United Kingdom; ⁴Imperial College Healthcare NHS Trust, London, United Kingdom

10.1136/thoraxjnl-2013-204457.247

Introduction and Objectives Multi-drug resistant tuberculosis (MDR-TB) is a growing concern¹. Cost of treatment is ten times that of fully sensitive TB. Treatment regimens are complex and prolonged with risk of serious adverse drug reactions (ADRs). Previously no single guidance in the UK has been available to inform clinicians on what baseline testing should be performed and how to monitor for ADRs². We would like to introduce the first UK guideline for adverse-effect monitoring in MDR-TB.

Methods This document has been written using the best available evidence and, where this is limited, expert consensus. Our multi-disciplinary guideline group held regular teleconferences and corresponded by email. When evidence was sparse, expert consensus was sought from the British Thoracic Society TB Special Advisory Group (SAG) and UK MDR-TB Advisory Service. When other specialty input was needed this was sought from experts in that field. Once the guideline was developed it was submitted to the TB SAG for peer review.

Results 'MDR-TB: A guideline for treatment monitoring' includes direction on baseline and generic monitoring throughout treatment and individual drug monographs for all drugs currently used to treat MDR-TB in the UK. At the time of writing it is due to be published online, later this month, and will be available on the BTS website (www.brit-thoracic.org.uk).

Conclusions We hope that by introducing a guideline to aid ADR monitoring in MDR-TB treatment we can improve morbidity and mortality and reduce treatment costs. By the time of the BTS Winter Meeting we will have nearly six months experience of this guideline being used in practice and will present any feedback received. In due course we plan to audit its use and publish our experiences.

REFERENCES

1. WHO. *Global Tuberculosis Report*. (2012).
2. Keal, J. L., Khachi, H., Hanzaree, E. & White, V. L. C. Treatment of multidrug resistant tuberculosis: where are the guidelines for monitoring? *Thorax* 66, A91–A91 (2011).

P98 **CERVICAL TB LYMPHADENITIS: A PREDOMINANTLY RIGHT-SIDED PHENOMENON DUE TO ASCENDING INFECTION FROM THE THORAX**

¹FV Cresswell, ²B Vijayakumar, ¹L John, ¹RN Davidson; ¹Northwick Park Hospital, London, UK; ²Whipps Cross Hospital, London, UK

10.1136/thoraxjnl-2013-204457.248

Introduction Cervical Tuberculous (TB) Lymphadenitis is the commonest presentation of extrapulmonary TB. There is however little evidence about its aetiology; consensus is divided as to whether it arises from infection via the pharyngeal lymphoid ring or from thoracic infection. Our clinical suspicions were that it is most frequently a right-sided phenomenon as a result of *Mycobacterium Tuberculosis* ascending the right paratracheal chain following pulmonary inoculation.

Methods We explored this hypothesis by retrospectively reviewing 211 cases of cervical TB lymphadenitis diagnosed at

Northwick Park Hospital in London. We assessed clinical findings, neck ultrasound findings, chest radiograph findings and explored the literature to see what other evidence exists to support or refute this hypothesis.

Results Clinical assessment found that 62.1% ($P < 0.0001$) cases had right-sided disease, 28.9% left-sided and 9.0% bilateral. Of the 153 ultrasound scans available, 62% showed supraclavicular lymphadenitis (levels IV&V nodes) and only 9.5% submental/submandibular lymphadenitis (level I nodes). 205 chest x-rays were studied, the most frequent abnormality was lymphadenopathy (40/205), including 25 paratracheal lymphadenopathy (23/25 right-sided). Notably, 22/23 patients with right paratracheal lymphadenopathy had right-sided cervical lymphadenitis.

Discussions Our findings suggest that ascending infection from the thorax via the paratracheal chain following pulmonary inoculation plays the greatest role in the aetiology of cervical lymphadenitis. We explain this using anatomical studies. Infection via the pharynx may be implicated in those exhibiting upper cervical lymphadenitis. In some low-resource setting where TB may be diagnosed on clinical grounds alone, knowledge that right-sided supraclavicular nodes are the most frequently affected may add confidence to clinical decision-making.

P99 **IMPACT OF TB CLUSTER INVESTIGATION IN A NEW MIGRANT COMMUNITY**

¹C Browne, ¹ML Munang, ²JS Evans, ²EG Smith, ¹S Khanom, ²P Hawkey, ¹H Kunst, ¹S Welch, ¹M Dedicat; ¹Heart of England NHS Foundation Trust, Birmingham, United Kingdom; ²Public Health England Regional Centre for Mycobacteriology, Birmingham, United Kingdom

10.1136/thoraxjnl-2013-204457.249

In a high incidence area of tuberculosis (TB), clinicians and nurses identified a sharp increase in the number of TB cases originating from a single country in March 2012 (average 3 per year in 2006–2008, 9 per year in 2009–2010, 20 cases in 2011 and 13 cases to March 2012). We undertook a social network approach to identify whether recent transmission had occurred.

56/66 (85%) cases from 2009 onwards were interviewed in their homes and perceptions of TB were explored. Median number of years in the UK was 4 years (IQR 2–5). Socialisation occurred mainly in private homes and places of worship, with 44/56 (78%) attending 9 places of worship. Twenty-three cases could be epidemiologically linked to an index case who was a prominent community member who had been symptomatic for 10 months. 24 loci mycobacterial interspersed repetitive unit-variable number tandem repeats (MIRU-VNTRs) strain typing was available in 19/24 (79%). Twelve had identical strain type to the index case. Six cases unexpectedly clustered in 4 other strain types.

As a result of the cluster investigation the TB service were invited to talk at a religious service and two community members became crucial in raising awareness. An additional 77 contacts identified themselves for screening with 59 (77%) completing investigations. Sixteen latent TB cases were treated, 7 were given BCG vaccination and 13 are still undergoing assessment.

Cluster investigation builds relationships and trust to provide accessible TB services in diverse communities. This new migrant community now has a high awareness of TB and future delays in TB diagnosis can be avoided.