

Diagnosis of TB in General Practice: Case Review

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Aim

To identify TB cases diagnosed in a practice population over a defined time period:

- Establish time to diagnosis from initial presentation
- Identify missed opportunities for early diagnosis
- Consider how we can do better
- (contact tracing?)

Why not do an audit?

- Small numbers of patients involved
- Practical issues:
 - natural history of TB, prolonged treatment etc (case definition, measurable outcomes)
 - susceptible populations are ‘hard to reach’, mobile
- Lack of national guidelines relating to TB diagnosis and management in primary care
 - what would be the audit standard?

Background

- South Norwood, Croydon.
- Relatively high migrant population (though historically Caribbean)
- Practice population ~10,000
 - UK TB rate 13.9/100,000
 - London TB rate 41.8/100,000
 - Croydon TB rate ~32.5/100,000(= expected rate in practice ~3/year?)

Case Review: search terms

- Registration: Permanent
- Read code: Of type **A1...00** Tuberculosis
 - (covers *Tuberculosis – cervical lymphadenitis, Other specified tuberculosis, Tuberculosis pleural effusion... etc*)
- Date of event:
 - Is Between 01 Jun 2011 and 16 Jun 2014 (INC)

Results 1

- 7 'hits' → 1 miscoding, 6 confirmed cases
- 2 new cases/year
- Below expected for Croydon/London, but...
 - Much local variation in demographics
 - TB incidence prob too low to draw meaningful conclusions at practice level
- Median time to CXR/referral ~10/52, mean number of presentations 3.5

Results 2

Case 1: 45 year old female, Indian-born

- At least 7 relevant GP contacts over 6/12 before referred to chest clinic (5 with cough, 1 ‘sore throat and slight LAD’)
- Visit #6, referred CXR (reported normal). Visit #7, the patient recalled visiting a relative in India with known TB 2/12 before first presentation. Referred chest physicians

Case 2: 50 year old female, African-Caribbean, HCW

- 3 GP contacts, 2 in same week (‘chest infection’); third was 5 months later (right sided chest pain)
- Referred for CXR and admitted to A&E from radiology (large pleural effusion)

Results 4

Case 3: 20 year old female, Afghan refugee

- 2 GP contacts within 1 week (3/52 h/o night fever, febrile on presentation → Hb 80, ESR 120. Febrile tachycardic, admitted via medics on second presentation)

Case 4: 48 year old male, UK-born African-Caribbean

- 3 GP contacts over 7 weeks, 1 A&E attendance (cough, chest pain, wheeze, night sweats). Referred CXR on visit #3 → TB service direct from radiology (perihilar shadowing)

Case 5: 52 year old male, white Irish

- Ex 20/d smoker. 5 presentations over 3 months, worsening cough, episodes haemoptysis. CXR- calcified nodules, referred chest clinic. Dx: latent TB, COPD (TB cultures –ve)

Results 5

- Case 6: 16 year old female, adopted child, Congolese-born
- GP noticed lack of BCG scar at routine fostering medical → referred to nurse-led BCG clinic
 - Strongly positive Mantoux test, referred TB service, CXR: ?previous TB. CT: “bud nodularity”. Regular outpatient monitoring, started TB treatment several months later.

Lessons/Conclusions

- Think TB!
 - chronic cough
 - early CXR/referral in susceptible groups (migrants from high risk countries, homeless, drug and alcohol misuse, imprisonment)
 - “Have you been/spent time overseas?”
- Practice/system issues
 - consider local demographics
 - prevention and screening of vulnerable groups.
- Can we be more systematic?