

Notification of tuberculosis in an area of low TB incidence

Notification of tuberculosis (TB) is a statutory requirement in the UK. Previous studies more than a decade ago, however, documented evidence of under-reporting, both in areas of low and high TB incidence, with estimates of up to 27%.¹ We wished to estimate the level of reporting at our hospital which is located in an area of the UK with a low incidence of TB (six cases/100,000 population). We undertook a survey of all prescriptions for the isoniazid and rifampicin combination drugs, rifinah-300 and rifinah-150, ethambutol and pyrazinamide during 2005. A case-note review was performed on the patients identified to ascertain which were being treated for TB, sputum positivity for acid fast bacilli if appropriate and whether culture confirmation was obtained. The names of patients with TB were correlated with those listed with the local Health Protection Agency to whom notifications are made. Forty patients were identified by this process with 25 being treated for TB. Of the others, four had atypical mycobacterial infection, six were being treated for latent TB, and five were given empirical trials of treatment but retrospectively considered not to have TB. Of the TB cases, 11 were culture positive (2 pulmonary, 7 lymph node, 1 ascites, 1 psoas abscess), three were smear positive but culture negative (all pulmonary) and the remaining had highly suggestive clinical features (3 meningeal, 5 pulmonary, 1 spinal, 1 laryngeal, 1 other) (Table 1). Only 13 (52%) of these cases were notified, but included 10 of the culture positives and all the smear positive cases. This suggests that notification levels were good when there

Table 1. Demographic of tuberculosis cases and percentage notified.

	Culture positive	Smear positive	Clinical diagnosis
Number of cases	11	3	11
Male	6	3	4
Site			
Pulmonary	2	3	5
Lymph node	7	0	0
Meningeal	0	0	3
Ascites	1	0	0
Spinal	0	0	1
Other	1	0	2
Number notified (%)	10 (91)	3 (100)	0

was positive microbiology (93%) but fell dramatically (0%) when this was not available. All appropriate notifications were subsequently made.

Our under-notification rate was higher than previously reported in the literature. We speculate that this may stem from the relatively low TB incidence in our area and consequently a reduced awareness to notify. Additionally, a number of cases were under the care of non-respiratory physicians, who may not have been as familiar with the notification process. Interestingly, virtually all patients with any form of positive microbiology were notified, suggesting that this led to a heightened awareness of this obligation. This mirrors previous findings.²

The true extent of the notification rate was still an estimate as we used a single source to define which patients may have been receiving first-line treatment for TB. It did not identify patients who may have received all their treatment from a community pharmacy source; patients being treated with secondary-line agents or

indeed patients who were diagnosed with TB but never received treatment (eg post-mortem diagnoses).

We reiterate the need to remind all healthcare workers to notify all clinically suspected TB cases, not just those with positive microbiology.

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