Letter in response to TB during TNF-α inhibitor therapy, despite screening

We read the case-based discussion published in Thorax by Hofland et al.1 with great interest. The case studies reported by the authors raise a very important point about the necessity for continued monitoring of patients on tumour necrosis factor (TNF)-α antagonist therapy, even in the absence of evidence of latent TB infection (LTBI) at the onset of therapy and this is a point that is not discussed in the most recent British Thoracic society (BTS) guidance document on TB and anti-TNF α treatment.2

The two cases described in the article would be classified as ‘low risk’ and thus not offered chemoprophylaxis if managed according to current BTS recommendations. The ethnicity of the patient in case 1 is not stated by the authors but unless she is black African or from the Indian subcontinent, she would be classified as being at ‘low risk’ of having LTBI. The patient in case 2 is Moroccan so would be classified in ‘other ethnic group’ by the BTS guideline. In both cases, chemoprophylaxis would not have been recommended by the guideline. Recent data suggest that a proportion of patients deemed to be ‘low risk’ according to the BTS guideline may still have evidence of LTBI as defined by either a positive tuberculin skin test (TST) or interferon γ release assay.3 However, in both of the patients reported, neither of these tests were positive. Based on this information, it would seem a reasonable strategy to avoid chemoprophylaxis in both cases, as the risks of therapy related hepatotoxicity theoretically outweigh the calculated risk of LTBI progression according to the tables contained in the BTS guideline. Both patients were managed in this way but subsequently developed active TB infection.

Based on current evidence, we would suggest that all patients are screened using a triple approach of risk calculation, TST and interferon γ release assay prior to commencement of TNF-α antagonist therapy, as highlighted by data from our study published in Thorax.1 However, we believe that the cases reported by Hofland et al highlight a further area not addressed in the current BTS guideline and suggest that all patients being commenced on TNF-α antagonist therapy should also be carefully counselled to inform their rheumatology specialist if they plan to travel abroad with screening offered if travel has occurred to a TB-endemic area for more than 1 month (the two cases described were only away for 4–5 weeks). Indeed, the risk of developing active TB should be considered throughout the duration of TNF-α antagonist therapy and not solely prior to commencement. Any new guideline now needs to consider the additional factor of travel in addition to any new contact with pulmonary TB.

We believe that data presented in our recent observational study1 and the cases presented by Hofland et al provide a strong case for reconsideration of national guidelines for screening and monitoring of patients already on TNF-α antagonist therapy and who have a substantive travel history or new TB contact. These aspects should be specifically addressed in any future National Institute for Health and Care Excellence guidance.

REFERENCES