Attenuated response to purified protein derivative in patients with rheumatoid arthritis

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Ann Rheum Dis 2006;**65**:980. doi: 10.1136/ard.2005.050161

The article by Ponce de Leon *et al*[1] highlights an important point that patients with rheumatoid arthritis (RA) have deficient cell mediated immunity. Therefore interpretation of delayed type hypersensitivity (DTH) is likely to be fraught with difficulties. This aspect of RA has been documented in a previous study,[2] which examined the response to standardised recall antigens, including purified protein derivative (PPD), and found a significant reduction in response to all antigens in patients compared with controls. In addition, it was found that addition of interleukin (IL) 2 improved lymphocyte transformation to within the normal range of controls. Thus a reduced DTH response to PPD in a patient with RA may be due to either a true negative or a false negative in a patient who is immune suppressed.

Recognising the problem of impaired immune responses, the British Thoracic Society (BTS) has recently published its recommendations on tuberculosis (TB) prophylaxis in patients being assessed for anti-tumour necrosis factor (TNF) treatment.[3] It notes that tuberculin skin testing is unreliable in patients receiving immunosuppressive treatment and therefore should not be done. The decision about TB chemoprophylaxis before anti-TNF treatment should be based on individual risk-benefit calculations, which involves looking at estimated annual risks of developing TB while receiving treatment with biological agents in populations of similar age and ethnic origin compared with the risks of drug induced hepatitis while receiving anti-tuberculous prophylaxis.

Clinicians involved in biological treatment should be aware of the unreliability of PPD testing and the new recommendations from the BTS in order to develop guidelines for effective clinical practice locally and nationally.

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Accepted 17 December 2005

REFERENCES

1 **Ponce de Leon D**, Acevedo-Vasquez E, Sanchez-Torres A, Cucho M, Alfaro J, Perich R, *et al*. Attenuated response to purified protein derivative in patients with rheumatoid arthritis: study in a population with a high prevalence of tuberculosis. *Ann Rheum Dis* 2005;**64**:1360–1.
2 **Emery P**, Panayi GS, Nouri AME. Interleukin-2 reverses deficient cell-mediated immune responses in rheumatoid arthritis. *Clin Exp Immunol* 1984;**57**:123–9.
3 **BTS**. British Thoracic Society Standards of Care Committee. British Thoracic Society recommendations for assessing risk and for managing mycobacterium tuberculosis infection and disease in patients due to start anti-TNF Rx. *Thorax* 2005;**60**:800–5.

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