

Images in...

Urinary tuberculosis associated to adalimumab

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DESCRIPTION

The authors report a case of a 52-year-old male with rheumatoid arthritis first diagnosed 30 years ago who had a partial response to multiple therapies with disease-modifying agents. He was started on a tumour necrosis factor- α (TNF- α) antagonist, adalimumab 40 mg every 2 weeks with progressive improvement of articular manifestations. He remained in the remission criteria range for about 3 years. Before beginning anti-TNF- α treatment he had a negative screening for mycobacterial infection or latent disease. The patient presented with a 6-months history of weight loss, asthenia and malaise. There was no

associated history of fever or night sweats. He also had persistent dysuria and haematuria non-responding to multiple antibacterial drug regimens. Physical examination was unremarkable. Laboratory findings showed a normal renal function, elevated inflammatory parameters (erythrocyte sedimentation rate of 38 mm/h and serum C reactive protein was 3–2 mg/dl), normocytic, normochromic anaemia (haemoglobin of 12.6 g/dl) and the urine analysis revealed presence of proteins, leucocytes and erythrocytes. Blood and urine bacteriological tests were negative for aerobic and anaerobic organisms. The direct search for *Mycobacterium* was negative. All diagnostic imaging exams (renal and bladder ultrasound and abdominal CT) were normal. Cystoscopy showed only inflammation and bladder biopsy performed to exclude a neoplastic process revealed non-caseous granulomatosis (figures 1 and 2). Six urine cultures for acid-fast bacilli were performed, with a positive result 4 weeks later. The patient started antituberculous drug treatment with complete resolution of symptoms. The overall incidence of serious infections associated with anti-TNF- α therapy has been estimated at 6.3 per 100 patient-years with adalimumab.¹ In most patients, tuberculosis represents reactivation of a previous infection. Diagnosing mycobacterial disease in patients treated with biologic agents is not always linear as they often present with extrapulmonary disease, generally as paucibacillary infections. In these cases, confirmation of the diagnosis is usually by culture.² To our knowledge, this is the first case reporting urinary tuberculosis in a

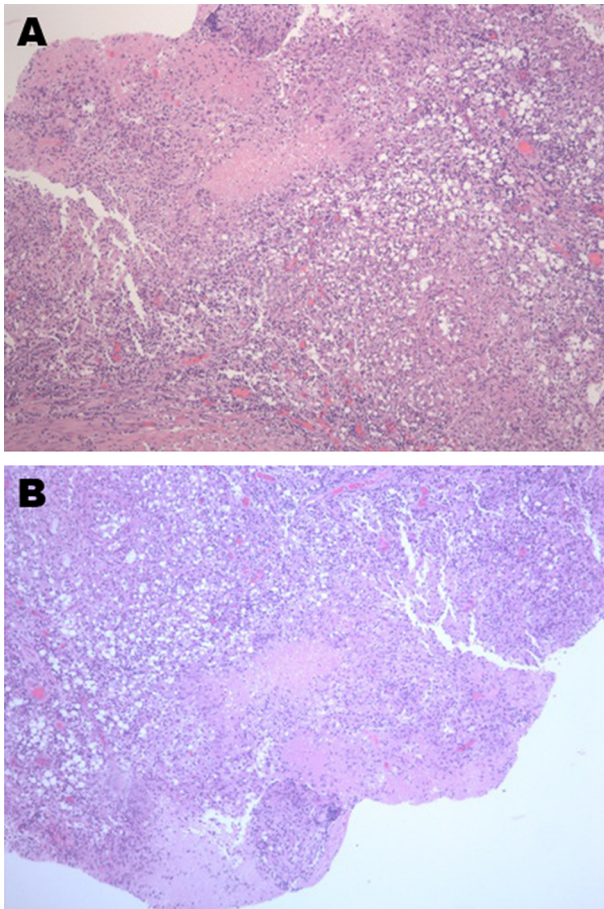


Figure 1 (A, B) Erosion of the entire epithelium. Intense lymphohistiocytic infiltrate. Epithelioid granulomas with central necrosis, non-caseous.

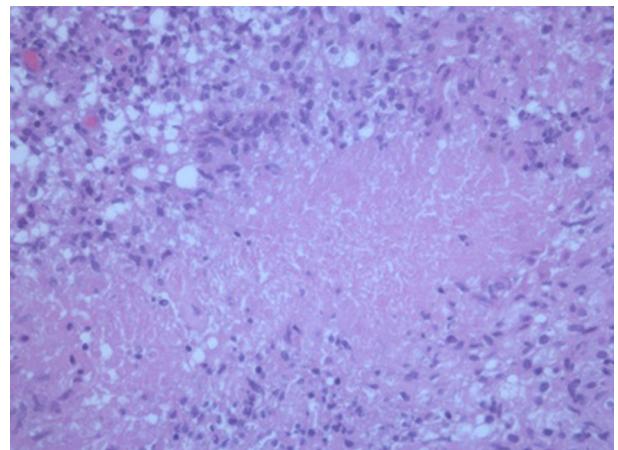


Figure 2 Amplified 100x – Epithelioid granulomas with central necrosis, non-caseous.

rheumatoid arthritis patient after 3 years of treatment with adalimumab.

Learning points

- ▶ Mycobacterial disease is a major cause of infection in patients treated with TNF- α antagonists.
- ▶ The diagnosis of urinary tuberculosis is difficult because its symptoms are non-specific.
- ▶ Screening has lowered the incidence of anti-TNF-associated tuberculosis, however the continuous monitoring of opportunistic infections should not be forgotten.

Competing interests None.

Patient consent Obtained.

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Please cite this article as follows (you will need to access the article online to obtain the date of publication).

Henriques CC, Sousa M, López B, Milheiro A, Riso N. Urinary tuberculosis associated to adalimumab. *BMJ Case Reports* 2012; 10.1136/bcr.11.2011.5247, Published XXX

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