Disclosures statement: The authors have declared no conflicts of interest.

Karim Sacre1, Elisa Pasqualoni1, Vincent Descamps3, Laurence Choudat3, Marie-Pierre Debray4 and Thomas Papo1

1Department of Internal Medicine, 2Department of Dermatology, 3Department of Pathology and 4Department of Radiology, Paris Diderot University, APHP, Bichat Hospital, Paris, France.

Accepted 2 November 2012

Correspondence to: Thomas Papo, Department of Internal Medicine, Paris Diderot University, APHP, Bichat Hospital, 46 rue Henri Huchard, 75018 Paris, France.
E-mail: thomas.papo@bch.aphp.fr

References


7 Kenefick KB, Adams JL, Steinberg H, Czuprynski CJ. In vivo administration of a mononclonal antibody against the type I IL-1 receptor inhibits the ability of mice to eliminate Mycobacterium paratuberculosis. J Leukoc Biol 1994;55:719–22.


As difficult as it could be to confirm the diagnosis of adverse drug reaction (ADR), there was no evidence of any other possible traumatic, infective, metabolic, hereditary, organic, vascular or mechanical cause that could explain the abnormalities in our case. The Naranjo scale [5] and Liverpool ADR causality assessment tool [6], which are commonly used methods to decide the likelihood of ADR, both suggested that TCZ is the probable cause of our patient’s hepatitis and a possible cause of his pancreatitis. Although mild elevation of transaminases is a known side effect of TCZ, the possibility of reversible severe hepatitis and also mild pancreatitis should be kept in mind when initiating therapy with TCZ.

### Rheumatology key message

- Rheumatoid arthritis patients treated with tocilizumab may develop severe hepatitis.

**Disclosure statement:** The authors have declared no conflicts of interest.

**Majd Alfreijat¹, Mohammadali Habibi², Primaljyot Bhatia² and Abhijit Bhatia³**

¹Department of Internal Medicine, MedStar Union Memorial Hospital, Baltimore, MD, ²Department of Rheumatology, Washington Hospital Center, Washington, DC and ³Department of Gastroenterology, MedStar Union Memorial Hospital, Baltimore, MD, USA.

Accepted 26 November 2012

Correspondence to: Majd Alfreijat, Department of Medicine, MedStar Union Memorial Hospital, 201 East University Parkway, Baltimore, MD 21218, USA.

E-mail: majd_freijat@yahoo.com

**References**


Rheumatology 2013;52:1341–1343
doi:10.1093/rheumatology/kes403
Advance Access publication 15 January 2013

**Tocilizumab-induced immune complex glomerulonephritis in a patient with rheumatoid arthritis**

Sir, Tocilizumab is a humanized anti-IL-6 receptor monoclonal antibody, which improves signs and symptoms of RA and prevents disease-associated joint damage [1, 2]. We describe here the first case of immune-mediated glomerulonephritis that developed during tocilizumab therapy. Written informed consent for publication was obtained from the patient.

A 61-year-old woman, who had suffered from seropositive RA for 13 years, was admitted to our hospital because of proteinuria and microhaematuria. When she was diagnosed with RA, no ANAs, anti-DNA antibodies or abnormal complement levels were detected. She had been taking low-dose prednisolone, methotrexate and meloxicam for 10 years. Eighteen months before admission, tocilizumab treatment (8 mg/kg every 4 weeks) was started because of uncontrolled arthritis. She had no proteinuria or haematuria and her serum creatinine level was 0.7 mg/dl at that point. Six-month tocilizumab treatment led to clinical remission. Two months before the admission, she developed oedema of the bilateral legs. She had no history of infection, serum sickness, SLE, vasculitis, diabetes mellitus or hypertension.

On physical examination, her blood pressure was normal. She had no synovitis or other abnormalities except for pitting oedema of the bilateral legs. Urinalysis revealed proteinuria and haematuria: more than 100 red blood cells per high-power field. Twenty-four hour urinary protein excretion was 2.0 g. The complete blood count was within the normal range. Serum C-reactive protein, creatinine and albumin were 0.5 mg/dl, 1.1 mg/dl and 3.3 g/dl, respectively. Serum IgG, IgM and IgA levels were within normal range. Circulating cryoglobulins were not detected. RF (43 IU/ml) was positive. ANA (1:40) and anti-dsDNA antibodies (14 IU/ml) were weakly positive. Serum C3 (57 mg/dl) and C4 (10 mg/dl) were measured with 2.0 g. The complete blood count was within the normal range. Serum C-reactive protein, creatinine and albumin were 0.5 mg/dl, 1.1 mg/dl and 3.3 g/dl, respectively. Serum IgG, IgM and IgA levels were within normal range. Circulating cryoglobulins were not detected. RF (43 IU/ml) was positive. ANA (1:40) and anti-dsDNA antibodies (14 IU/ml) were weakly positive. Serum C3 (57 mg/dl) and C4 (10 mg/dl) levels were low. Circulating immune complexes (3.8 μg/ml) measured with C1q binding assay were increased. Anti-Sm antibodies, anti-RNP antibodies, anti-GBM antibodies, MPO-ANCA, PR3-ANCA, hepatitis B surface antigen, hepatitis C antibodies and HIV antibodies were negative. Anti-streptolysin O (ASO) and anti-streptokinase (ASK) titres were normal. Antibodies reactive to Fab fragments of tocilizumab were not detected. Imaging studies showed no evidence of malignancy.

Renal biopsy revealed that 4 of 39 glomeruli had global sclerosis. Fifteen glomeruli displayed focal segmental

www.rheumatology.oxfordjournals.org