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# Mesalazine-induced interstitial nephritis in a patient with ulcerative colitis

Emmanuel Cruz Gorospe, Cadman L Leggett

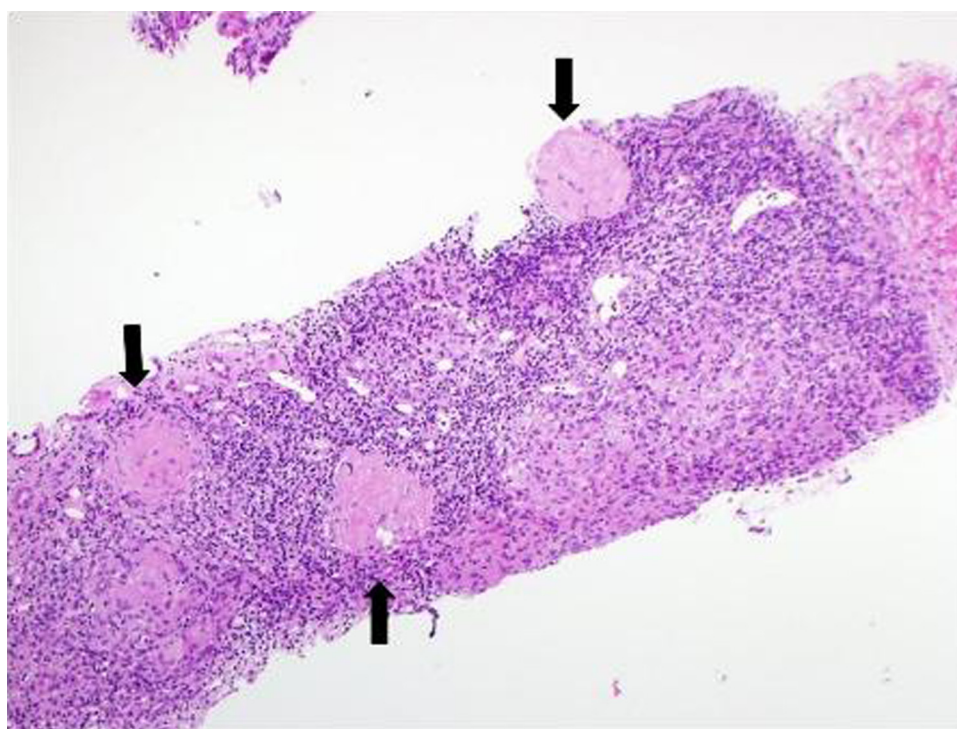
Division of Gastroenterology and Hepatology, Mayo Clinic College of Medicine, Rochester, Minnesota, USA

**Correspondence to** Dr Emmanuel Cruz Gorospe, gorospe.emmanuel@mayo.edu

## DESCRIPTION

A 25-year old male with a 10-year history of ulcerative colitis (UC), maintained on clinical remission with mesalazine (1.5 g/day) presented with 1-week history of progressive fatigue and nausea. He had no other symptoms such as fever, arthralgia or skin rashes. He was found to be in renal failure with the following laboratory parameters: serum creatinine 13.9 mg/dl, urea 138 mg/dl, sodium 140 mmol/l, potassium 4.3 mmol/l and phosphorus 9.7 mg/dl. He had 11% eosinophils on his blood count. A 24-h urine collection showed proteinuria of 210 mg. Renal ultrasound did not reveal any hydronephrosis, nephrolithiasis or cortical atrophy. Kidney biopsy showed active interstitial nephritis with granulomatous reaction (figure 1). Special immunostains did not reveal any evidence for acid-fast bacilli or fungal agents. Given the history of UC and mesalazine use, the

histopathology supports the diagnosis of a drug-associated renal injury. Mesalazine was discontinued and the patient was started on intravenous methylprednisolone and discharged on oral prednisone taper. At 2 months follow-up, his creatinine improved to 9 mg/dl in spite of remaining asymptomatic. He is currently undergoing evaluation for kidney transplant. 5-aminosalicylates are used in the treatment of inflammatory bowel disease (IBD). Interstitial nephritis is a rare but serious complication of mesalazine use. This adverse drug reaction is likely idiosyncratic. The clinical presentation is usually non-specific.<sup>1 2</sup> There are no guidelines to recommend routine surveillance of renal function in IBD patients on mesalazine therapy. Frandsen *et al* recommend measurement of serum creatinine prior to the start of mesalazine treatment and every 6 months thereafter.<sup>3</sup>



**Figure 1** Kidney biopsy (H&E stain): active interstitial nephritis with granulomatous reaction.

# Learning points

- ▶ Interstitial nephritis is a rare but serious complication of longer term mesalazine use.
- ▶ Routine surveillance of renal function in patients on long-term mesalazine maintenance regimen may avert serious renal injury.
- ▶ Management of mesalazine-induced interstitial nephritis includes discontinuation of mesalazine and trial of corticosteroid therapy.

**Acknowledgements** The authors would like to thank Dr Loren P Hernandez for providing the histopathology photomicrographs for this case.

**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).

Gorospe EC, Leggett CL. Mesalazine-induced interstitial nephritis in a patient with ulcerative colitis. *BMJ Case Reports* 2012; 10.1136/bcr.12.2011.5351, Published XXX

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