

Correspondence

Acute interstitial nephritis secondary to long-term use of cetirizine for the treatment of urticaria pigmentosa

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Antihistamines are widely used by dermatologists to help control the symptoms of a range of pruritic conditions, but also specifically for the treatment of urticaria and other mast cell-driven disorders. These drugs are considered safe, with few serious side-effects, so routine monitoring is rarely performed. We report the case of a patient with acute interstitial nephritis (AIN) associated with the antihistamine cetirizine.

A 63-year-old man presented with a 9-month history of lethargy, thirst and nocturia. The patient had a 22-year history of urticaria pigmentosa, and had received courses of narrowband (TL-01) phototherapy. He had been taking cetirizine 10 mg daily for 5 years.

Laboratory investigations showed that the patient had raised urea (18.5 mmol/L; normal range 2.5–7.5 mmol/L) and creatinine (389 µmol/L; 60–110 µmol/L). Results of renal ultrasonography were within normal limits.

On histological examination of a renal biopsy, a heavy lymphocytic and plasma cell infiltrate was seen within the interstitium, with occasional eosinophils. Granulomas formed of clustered histiocytes were also present (Fig. 1a,b).

The findings were typical of AIN with a hypersensitivity/allergic aetiology. Cetirizine was discontinued immediately, and the patient was started on oral prednisolone 60 mg, which was tapered off over the next 18 months. His condition improved quickly and remains stable, but with approximately 30% of predicted normal renal function.

AIN is a common form of acute kidney injury with many causes, including allergic, drug-induced, infectious, autoimmune, systemic and idiopathic.¹ Drug-induced AIN is the commonest of these, underlying 60–70% of cases.²

Cetirizine is a second-generation histamine receptor antagonist, which is licensed for the treatment of seasonal and perennial allergic rhinitis and urticaria.³ Loratadine, which belongs to the same group of H1 antagonists as cetirizine, has been reported as causing AIN⁴, but cetirizine is considered to be a safer alternative, with no previous

reports of AIN.⁵ Serious complications due to antihistamines are extremely rare.

Idiopathic cases of AIN do occur, but the case for cetirizine being the culprit here is compelling. Firstly, the biopsy result was typical of a hypersensitivity reaction; secondly, the patient was on no other medication; and finally, there was a rapid improvement upon withdrawal of

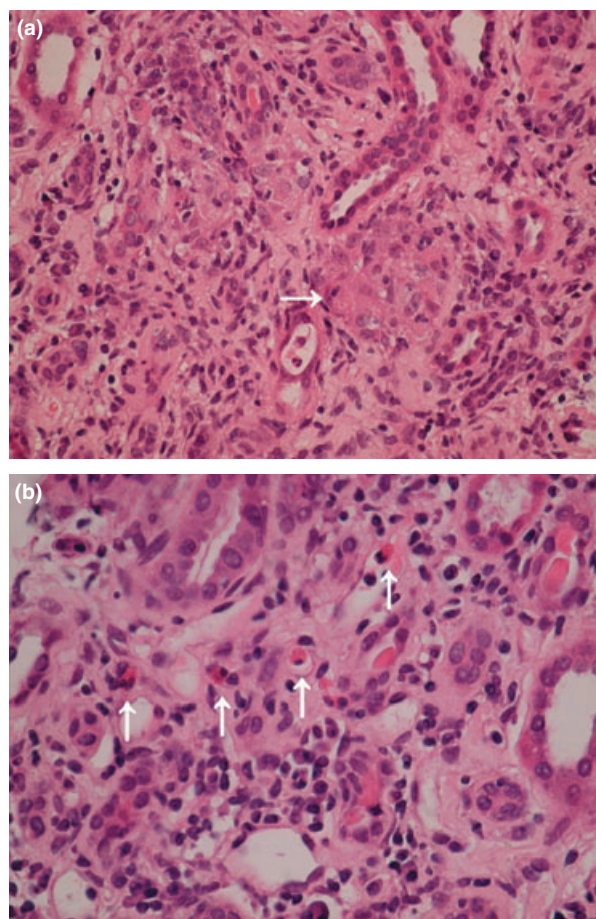


Figure 1 (a) The interstitial inflammatory cell infiltrate was composed predominantly of lymphocytes and plasma cells. A non-necrotizing granuloma (arrow) is visible, with closely packed epithelioid histiocytes. (b) Occasional eosinophils (arrows) were present within the interstitial inflammatory infiltrate (haematoxylin and eosin, original magnification (a) $\times 400$; (b) $\times 600$).

cetirizine. The incomplete recovery of renal function could be due to the prolonged exposure to the drug and the severity of the nephritis.

AIN is an extremely rare complication but it causes significant morbidity, and cetirizine is used so widely that highlighting this case is warranted. We would recommend that renal function monitoring is considered in patients receiving long-term treatment with cetirizine and related products.

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