Tubulointerstitial Nephritis with Uveitis Syndrome following Varicella Zoster Reactivation

D. Dragan Ljutić
M. Meri Glavina

Departments of aInternal Medicine and bPathology, Clinical Hospital Split, Croatia

Dragan Ljutić, MD, PhD, Department of Internal Medicine, Clinical Hospital Split, 58 000 Split (Croatia)

Acute tubulointerstitial nephritis with uveitis (TINU) syndrome is a relatively new syndrome first described in children, and more recently in adults [1]. To our knowledge only 15 cases of this entity in adults have been reported so far. In all of them there were no history, clinical or laboratory findings of previous bacterial, viral or collagen vascular disease. We describe here a patient with a TINU syndrome in whom a herpes zoster preceded the full clinical picture.

A 49-year-old woman was referred to the Renal Unit because of azotemia and fatigue. Two months earlier, she had had herpes zoster located on the right T11 dermatome. Twenty days after skin eruption, iridocyclitis of the left, and a week later of the right eye were diagnosed and successfully treated. During that time she had general malaise, fatigue, anorexia, and mild fever. The erythrocyte sedimentation rate (ESR) was 106 mm/h, serum creatinine 154 µmol/l, total protein 85.5 g/l, IgG 20.8 g/l, IgA 6.8 g/l, and circulating immune complexes 0.180 g/l. Serology revealed previous cytomegalovirus-, Epstein-Barr, herpes simplex, and varicella zoster virus infections. Because of an increment of creatinine over the following 3 weeks, she was referred to our unit.

On admission, the physical examination was unremarkable. Laboratory tests revealed ESR of 110 mm/h, normocytic normochromic anemia (hemoglobin 104 g/l), urea of 17.5 mmol/l, creatinine of 664 µmol/l (later, the highest was 671 µmol/l), IgG of 19.8 g/l, and IgA of 7.1 g/l. Other biochemical—

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malities. Immunofluorescence studies were negative. Prednisone was given (80 mg, with subsequent slowly tapering). Serum creatinine decreased to 156 µmol/L within 2 weeks. The follow-up of 4 months revealed stable renal function and no uveitis relapse. In the present case, typical clinical and laboratory findings of TINU syndrome followed herpes zoster. At the time of hospitalization there was no serological evidence of acute viral infection, but there was evidence of previous herpes simplex, varicella zoster, cytomegalovirus- and Epstein-Barr virus infec-

tions. It is known that herpes simplex virus can produce tubulointerstitial nephritis [2]. The same is true for cytomegalovirus- and Epstein-Barr viruses [3, 4]. Varicella zoster virus reactivation has also been associated with a deterioration in renal failure, but there were no histological or microbiological data showing that herpes zoster causes tubulointerstitial nephritis [5]. The question is whether preceding viral reactivation (in the present case of varicella zoster) could be a trigger, the cause, or a consequence of the immunological disorder underlying TINU.

References