

**Abstract Type : Poster**

**Abstract Submission No. : PO-1185**

## **A case of tubulointerstitial nephritis in a patient with an influenza A infection**

**Hee Hyang Moon**<sup>1</sup>, Yuil Kim<sup>2</sup>, Ho Chul Song<sup>1</sup>, Yong Kyun Kim<sup>1</sup>, Ji Won Min<sup>1</sup>, Myungah Ha<sup>1</sup>

<sup>1</sup>Department of Internal Medicine-Nephrology, The Catholic University of Korea, Bucheon St. Mary's Hospital, Korea, Republic of

<sup>2</sup>Department of Pathology, The Catholic University of Korea, Bucheon St. Mary's Hospital, Korea, Republic of

**Case Study:** Patients with an influenza A infection mainly suffer from respiratory symptoms but may also develop symptoms in other organ systems, such as kidneys. But acute renal failure requiring hemodialysis is not common among patients affected by influenza.

We report a patient who developed acute renal failure due to acute tubulointerstitial nephritis associated with influenza A infection.

A 22-year-old female without underlying disease was diagnosed with influenza A in December 2018 and took oseltamivir. However, after taking oseltamivir, she stopped taking medication due to vomiting and continued to have general weakness, nausea and vomiting. The symptoms persisted and she visited the hospital.

On examination, She had a stable vital status and the urine output was maintained at 0.5cc/kg per hour. Laboratory investigations revealed blood urea, 109.5 mg/dl; serum creatinine, 13.36 mg/dl. Hematuria and proteinuria were not observed, abdomen CT showed diffuse bilateral renal enlargement. Tests for antinuclear antibody, antineutrophil cytoplasmic antibody, anti-glomerular basement membrane antibody, anti-double-stranded DNA antibody and cryoglobulin were all negative with normal complement.

We performed kidney biopsy and showed no sclerosis and deposit findings in all glomeruli except for the appearance of a mild mesangial proliferation in a single crescentic glomerulus (8.3%). Tubules showed mild necrosis. Tubulointerstitium was mildly prominent for uniform edema and diffuse infiltration with leukocytes (mononuclear cell, neutrophils and plasma cell). Thus the diagnosis of acute tubulointerstitial nephritis was made. She maintained hemodialysis for 2 days and then improved the creatinine with fluid therapy. Her condition also improved rapidly and she was discharged with serum creatinine, 1.31 mg/dl. Her serum creatinine was 0.72 mg/dl at 1 month follow-up.

We present a severe but reversible case of acute tubulointerstitial nephritis and acute renal failure associated with influenza A infection. We looked up the case, but the case was rare and we have submitted this case.