An 43-year-old male was admitted to the hospital due to vomiting and oliguria. He was well until seven days ago when he began to develop a headache and then he gradually developed nausea. His plasma creatinine was 6.5 mg/dL. Urinalysis showed mild proteinuria without hematuria and leukocytes. No kidney diseases were documented in his past medical history or family history. His kidney function worsened gradually, then he directed toward peritoneal dialysis. The patient was a wild-life protectionist for 12 years and had normal kidney function during the annual health checkups until last year. He had a routine exercise schedule including regular long-distance walking in warm temperatures for several years, and his physical activity was intensified during the past few months. Although he experienced increase in sweating, he insisted on “not drinking water” during his walking and climbing exercises aimed for improvement of his physical stamina in trainings.

His renal biopsy showed involvement of tubulo-interstitial compartment with dilated tubules filled with casts alternating with small atrophic tubules with marked interstitial fibrosis in the background (Figure 1). The glomeruli and blood vessels were largely unremarkable. Immunofluorescence findings was also unremarkable. Considering the repeated dehydration episodes without drinking sufficient fluid, chronic dehydration-related nephropathy could be considered in this case. This is similar to the cases observed among young male workers engaged in sugarcane cultivation in Central America and it was later reported in other types of agriculture activities in hot climates. Affected individuals were asymptomatic, with normal or slightly elevated blood pressure coupled with mild proteinuria and inactive urine sediments. Like our patient (Figure 2), their renal biopsies showed chronic...
tubulointerstitial involvement with tubular atrophy and fibrosis (1-3).

Authors’ contribution

Conflicts of interest
The authors declare that they have no conflicts of interest

Ethical issues
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