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# Rimfapin 복용 후 저칼륨혈성 마비를 동반하여 발생한 세뇨관간질신염과 Fanconi증후군

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# Rifampin-associated Tubulointersititial Nephritis and Fanconi Syndrome Presenting as Hypokalemic Paralysis

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**Background:** Rifampin is one of the most important drugs in first-line therapies for tuberculosis. The renal toxicity of rifampin has been reported sporadically and acute tubulointerstitial nephritis (ATIN) is a frequent histological finding. We describe for the first time a case of ATIN and Fanconi syndrome presenting as hypokalemic paralysis, associated with the use of rifampin.

**Case presentation:** A 42-year-old man was admitted with sudden-onset lower extremity paralysis and mild renal insufficiency. He had been treated for pulmonary tuberculosis with isoniazid, rifampin, and ethambutol for 2 months. Laboratory tests revealed proteinuria, profound hypokalemia, hyperchloremic metabolic acidosis with a normal anion gap, positive urine anion gap, hypophosphatemia with hyperphosphaturia, hypouricemia with hyperuricosuria, glycosuria with normal serum glucose level, generalized aminoaciduria, and β2-microglobulinuria. A kidney biopsy revealed findings typical of ATIN and focal granular deposits of immunoglubulin A and complement 3 in the glomeruli and tubules. Electron microscopy showed epithelial foot process effacement and electron-dense deposits in the subendothelial and mesangial spaces. Cessation of rifampin resolved the patient's clinical presentation of Fanconi syndrome, and improved his renal function and proteinuria.

**Conclusion:** This case demonstrates that rifampin therapy can be associated with Fanconi syndrome presenting as hypokalemic paralysis, which is a manifestation of ATIN. Kidney function and the markers of proximal tubular injury should be carefully monitored in patients receiving rifampin.

**Key Words:** Rifampin, Fanconi증후군, 세뇨관간질신염
Rifampin, Fanconi syndrome, Tubulointerstitial nephritis