

[ PICTURES IN CLINICAL MEDICINE ]

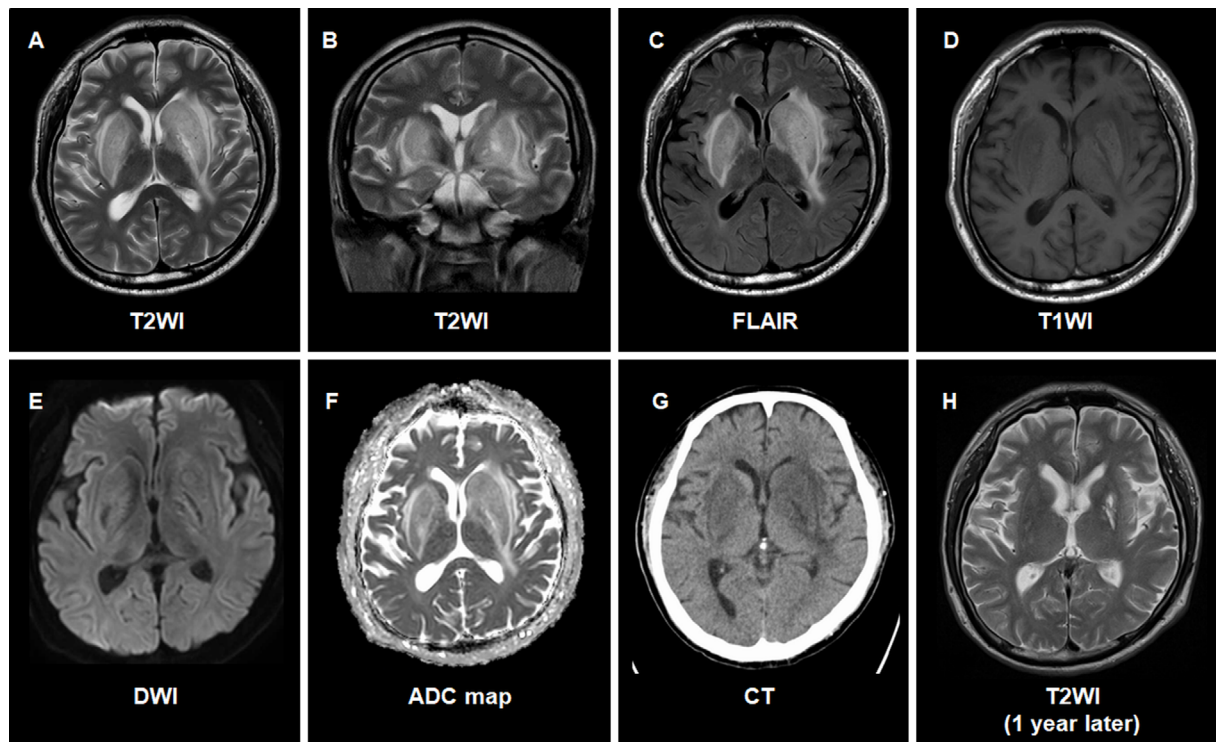
## Reversible Parkinsonism Due to Diabetic Uremic Syndrome

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**Key words:** parkinsonism, uremia, uremic encephalopathy, diabetic uremic syndrome

(Intern Med 59: 3251-3252, 2020)

(DOI: 10.2169/internalmedicine.5355-20)



**Picture.**

A 41-year-old diabetic man with end-stage renal disease who was on hemodialysis for 8 years presented with subacute progressive speech difficulty and dysfunction of his hands interfering with daily activities. A neurological examination revealed parkinsonism with bilateral bradykinesia and lead-pipe rigidity as well as postural instability. His motor score on the Unified Parkinson's Disease Rating Scale (UPDRS Part III) (1) was 25. Laboratory studies showed elevated blood urea nitrogen (57.3 mg/dL), creatinine (12.59 mg/dL), and potassium (5.5 mEq/L) levels and a hemoglobin A1c value of 6.1%. Magnetic resonance imaging (MRI) of the brain showed the following findings: hyperintensity of bilateral symmetric basal ganglia with a bright hyperintense

rim delineating the lentiform nucleus on T2-weighted and fluid-attenuated inversion recovery images, which is known as the "lentiform fork sign" (Picture A-C) (2); in contrast, the rim of the lentiform nucleus was hypointense on T1-weighted imaging (Picture D). There was no restricted diffusion on diffusion-weighted imaging or an apparent diffusion coefficient map (Picture E, F). Computed tomography of the head revealed bilateral hypodensity involving the basal ganglia (Picture G). He was diagnosed with diabetic uremic syndrome. This uncommon syndrome is likely to occur in patients with diabetes who develop end-stage renal failure (3). After several hemodialysis sessions with improvements in dialysis efficacy, his parkinsonism diminished

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Received: May 17, 2020; Accepted: June 22, 2020; Advance Publication by J-STAGE: August 4, 2020

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(UPDRS Part III, 3), and the lentiform fork sign on magnetic resonance imaging disappeared after one year (Picture H).

**The authors state that they have no Conflict of Interest (COI).**

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