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【 PICTURES IN CLINICAL MEDICINE 】

Low Signal Intensity of Kidney Cortex with Chronic Kidney Disease

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Key words: paroxysmal nocturnal hematuria, magnetic resonance imaging, chronic kidney disease

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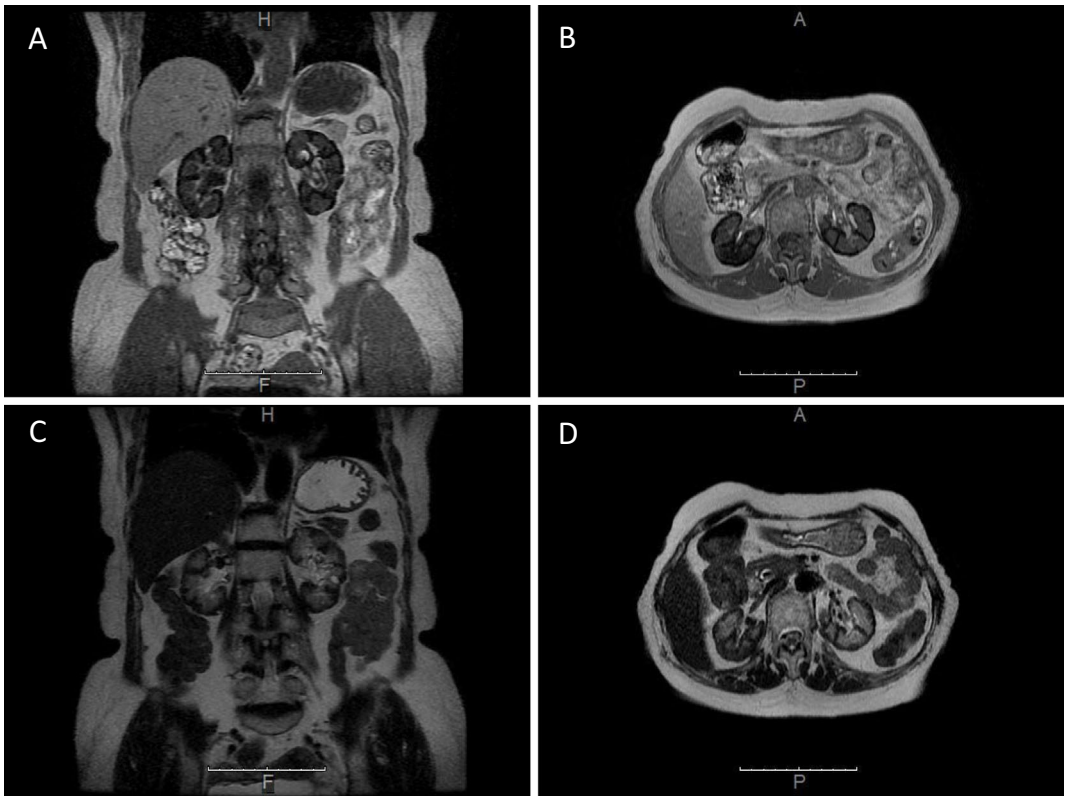

Picture.

A 68-year-old woman presented with exacerbation of chronic kidney disease (CKD). She had anemia and thrombocytopenia and had been diagnosed with myelodysplastic syndrome over 10 years ago. Cyclosporine was discontinued because her estimated glomerular filtration rate (eGFR) had declined. After 6 months, her hemoglobin level declined with a high reticulocyte count, lactate dehydrogenase (LDH) level of 901 IU/L, and undetectable haptoglobin level, indicating intravascular hemolysis. Abdominal magnetic resonance imaging (MRI) showed a low signal intensity of the renal cortex in both T1- (Picture A, B) and T2-weighted images (Picture C, D) and reversed cortico-medullary differentiation, suggesting renal hemosiderosis (1). The results of a Coombs test and flow cytometric analysis were consistent with a diagnosis of paroxysmal nocturnal hematuria (PNH). The administration of eculizumab was started. The LDH level returned to normal, and the eGFR improved from 28 to 40 mL/min, remaining stable for over a year. When CKD

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is associated with possible bone marrow failure or intermittent colored urine, MRI might help establish a diagnosis.

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

Reference

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