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Trends in Mineral Metabolism Treatment Strategies in Patients Receiving Hemodialysis in the United States
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Validation of a Core Patient-Reported Outcome Measure for Fatigue in Patients Receiving Hemodialysis: The SONG-HD Fatigue Instrument
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Association of VA Payment Reform for Dialysis with Spending, Access to Care, and Outcomes for Veterans with ESKD
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Research Letter

QT Interval in Adult with Chronic Hypokalemia due to Gitelman Syndrome: Not so Frequently Prolonged
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On the Cover

What is the diagnosis?
We report on a 46-year-old Japanese woman admitted for kidney failure. The patient was 164 cm tall and weighed 120 kg; her BMI was 44.6 kg/m². At admission, blood pressure was 186/86 mm Hg; creatinine, 5.7 mg/dl; serum glucose, 81 mg/dl; HbA1c, 5.1%; and urinary protein excretion, 4.1 g/d. She had neither history of smoking nor diabetic retinopathy, and had been severely obese with a weight of more than 110 kg since the age of 20.

Image Description:
Light microscopy of a kidney biopsy specimen showed multiple nodules (arrow) on the peripheral capillaries of the glomeruli (left image), immunofluorescence showed mild linear staining for IgG, and electron microscopy showed a marked increase (small arrow) in the mesangial matrix and a thickening (large arrow) of the glomerular basement membrane to 800 to 950 nm (right image).

Teaching Points:
If this patient had a history of diabetes, kidney biopsy would be diagnosed as nodular diabetic nephropathy. However, in the absence of diabetes, the diagnosis is idiopathic nodular glomerulosclerosis. Idiopathic nodular glomerulosclerosis resembles nodular diabetic nephropathy and has been reported to occur in nondiabetic smokers. This case indicates that long-standing severe obesity may contribute to idiopathic nodular glomerulosclerosis via hyperfiltration, similar to diabetic nephropathy, even in nondiabetic nonsmokers.

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