A 69-YEAR-OLD WOMAN WITH CHRONIC KIDNEY DISEASE AND MYELOFIBROSIS presented to the emergency department with a 2-day history of dyspnea and general weakness. The patient had a hemoglobin level of 7.2 g per deciliter (reference range, 11.1 to 15.0), hyperkalemia, and a serum creatinine level of 6.7 mg per deciliter (592 µmol per liter; reference range, 0.4 to 1.1 mg per deciliter [3.5 to 97.2 µmol per liter]). Abdominal ultrasonography revealed hyperchoic structures around both kidneys. Magnetic resonance imaging of the abdomen, performed without the administration of contrast material, revealed splenomegaly, a normal-appearing liver, ascites, and rimlike lesions on both sides of the perirenal space (Panel A, arrows). A biopsy specimen obtained from the left perirenal lesion had hematopoietic elements, including erythroid and myeloid precursors (Panel B, blue and red arrows, respectively) and megakaryocytes (Panel B, yellow arrow), with focal hemosiderin deposition, all of which were suggestive of perirenal extramedullary hematopoiesis (i.e., hematopoiesis that occurs outside the bone marrow). In this patient, the extramedullary hematopoiesis was associated with the diagnosis of myelofibrosis. The liver and spleen are the organs most frequently involved. The patient was treated with peritoneal dialysis and a Janus kinase inhibitor. On follow-up at 6 months, she reported resolution of her symptoms and increased energy.

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