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On the Cover

What's the diagnosis? A 30-year-old pregnant Caribbean woman presented to the hospital with sudden onset of edema in the first trimester. She had no significant medical history and had no family history of kidney disease. Her daughter was diagnosed with Fifth's disease several weeks prior, and subsequently the patient was found to have acute parvovirus infection with positive IgM antibodies and a viral load. Her course was complicated by fetal demise, and nephrotic range proteinuric acute kidney injury with serum creatinine 6.3 mg/dl, serum albumin 1.5g/L, and 20 grams of proteinuria. She underwent a renal biopsy that revealed dilated microcystic tubules (cover image, left panel) and focal segmental glomerulosclerosis (cover image, right panel). These findings are typically seen with HIVAN (Human Immunodeficiency Virus Associated Nephropathy), but as suggested here, other viral illnesses may cause similar findings. Parvovirus infection has been associated with collapsing FSGS in the literature. Other lesions also described include a postinfectious GN, thrombotic microangiopathy and Henoch Schölein purpura. The patient developed thrombocytopenia and bone marrow failure from the parvovirus and was treated with IVIG. Her hematologic parameters improved, but her kidney disease progressed to ESRD over a few months and she was started on dialysis. (Image and text provided by Whitney Besse, MD, Nephrology Fellow, Yale; Sherry Mansour, MD, Nephrology Fellow, Yale; and Ursula C. Brewster, MD, Associate Professor of Medicine Yale School of Medicine)