A 56-year-old woman with a history of diabetic nephropathy was admitted because of acute onset of epigastric pain, fever, chills, and rigor. After admission, she developed septic shock and acute-on-chronic renal failure. She required inotropic support and intensive medical care.

Blood tests showed marked leukocytosis to $40.7 \times 10^9/L$. Blood culture found *Escherichia coli*. Computed tomography (CT) of the abdomen performed to evaluate a possible intra-abdominal source of the sepsis revealed bilateral acute renal cortical necrosis (ARCN) (Figures 1 and 2). Features of acute cholecystitis were also found. The sepsis resolved after percutaneous cholecystostomy.

Acute renal cortical necrosis is a rare cause of acute renal failure. It is usually bilateral, involving infarction of the renal cortex but sparing of the renal medulla. It is a known complication of pregnancies in which there is abruption placentae or preeclampsia. Infection frequently precedes ARCN in both adolescents and adults [1,2]. Other possible causes include dehydration, ethylene glycol poisoning, and a venomous snakebite.

It usually presents as oliguria. The renal cortex is initially hypoechoic on ultrasonography [3], but it can be subtle. During the acute phase, nonenhancement of the cortex and preserved enhancement of the medulla are seen with contrast-enhanced CT, which are signs...
specifically indicating ARCN. A rim of subcortical enhancement is demonstrated as collaterals develop from the capsular vessels. Tramline calcification along the margins of both viable and necrotic renal tissue is pathognomonic, and is usually detected 4–5 weeks after disease onset [4]. Renal size progressively diminishes over months.

The prognosis for patients with ACRN is unfavorable, and patients often require long-term renal replacement therapy.

REFERENCES