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THE AUTHORS REPLY: Plachouras et al. make an important point. As suggested in our article and in a report regarding another patient with EVD treated in Germany,¹ sepsis due to bacterial translocation may contribute to mortality in EVD. Accordingly, 70% of the patients treated in Europe or the United States were given intravenous broad-spectrum antibiotics (unpublished data), and we agree that possible multidrug resistance should be considered when treating EVD. However, accounting for this factor in West Africa is limited by high costs and low availability of new broad-spectrum antibiotics.

Furthermore, data on the true contribution of bacterial coinfection to mortality in EVD are lacking, and the prevalence of multidrug-resis-

tant bacteria is unknown. Although broad-spectrum antibiotics are administered to patients with EVD in treatment facilities in Africa as part of supportive treatment,² the effect of antimicrobial treatment on mortality remains unclear, and the effect of multidrug resistance can only be guessed. As highlighted in the WHO report on antimicrobial resistance,³ improving the surveillance of antimicrobial resistance in Africa is essential in monitoring trends and improving the availability of data in the future.

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Since publication of their article, the authors report no further potential conflict of interest.

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A Case of Iced-Tea Nephropathy

TO THE EDITOR: A 56-year-old man presented to the hospital in May 2014 with weakness, fatigue, body aches, and an elevated serum creatinine level (4.5 mg per deciliter [400 μmol per liter]). Review of his medical record indicated previous creatinine levels of 1.2 mg per deciliter (110 μmol per liter) in October 2013 and 2.5 mg per deciliter (220 μmol per liter) in February 2014. He had no proteinuria or hematuria. The urine sediment was remarkable for the presence of abundant calcium oxalate crystals. He did not have a personal history of kidney stones or any family history of kidney disease. He reported not consuming ethylene glycol. He had no malabsorptive symptoms or history of gastric surgery. On further questioning, the patient admitted to drinking sixteen 8-oz glasses of iced tea daily. Worsening renal failure with uremic symptoms necessitated the initiation of dialysis.

Owing to the rapidly progressive nature of the patient's renal failure yet normal kidney size on ultrasonography, a renal biopsy was performed, which showed many oxalate crystals, interstitial inflammation with eosinophils, and interstitial edema consistent with a diagnosis of oxalate nephropathy (Fig. 1). The urinary oxalate excretion was elevated, at 99 mg (1100 μmol) in 24 hours (normal, 7 to 44 mg [80 to 490 μmol]).

Cases of acute oxalate nephropathy have been reported with *Averrhoa carambola* (star fruit), *A. bilimbi* (cucumber tree fruit), rhubarb, and peanuts. Our patient had none of the factors that have previously been associated with hyperoxaluria, such as gastric bypass surgery, overingestion of ascorbic acid, the use of "juicing," or ethylene glycol poisoning. The average daily intake of oxalate in the United States is 152 to 511 mg per day,^{1,2} which is higher than that recommended

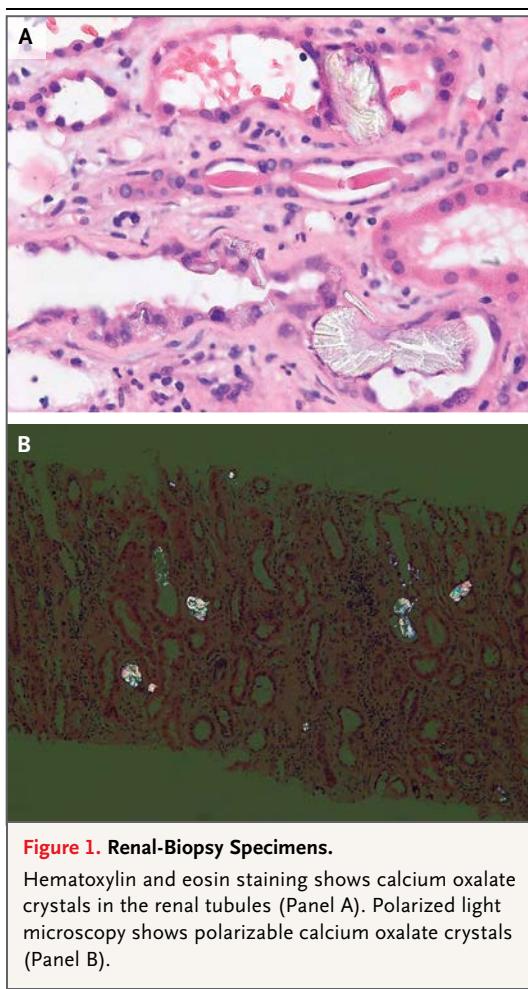


Figure 1. Renal-Biopsy Specimens.

Hematoxylin and eosin staining shows calcium oxalate crystals in the renal tubules (Panel A). Polarized light microscopy shows polarizable calcium oxalate crystals (Panel B).

by the Academy of Nutrition and Dietetics (<40 to 50 mg per day).

Black tea is a rich source of oxalate, containing 50 to 100 mg per 100 ml, a level that is similar to or higher than that in many foods considered to be rich in oxalate.³⁻⁵ About 84% of tea consumed in the United States is black tea. With 16 cups of tea daily, the patient's daily consumption of oxalate was more than 1500 mg — a level that is higher than the average American intake by a factor of approximately 3 to 10.

We speculate that oxalate nephropathy may be an underrecognized cause of renal failure. In cases of unexplained renal failure in which proteinuria is absent and abundant oxalate crystals are present in urine sediment, a thorough dietary history should be obtained, because the kidney dysfunction could be a manifestation of oxalate nephropathy from an oxalate-rich diet. The case presented here was almost certainly due to excessive consumption of iced tea.

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The conference will be held in Da Nang, Vietnam, April 13–17. It is presented by the Vietnam Association of Emergency, Critical Care Medicine and Medical Toxicology. The conference is supported by the Society of Critical Care Medicine.

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