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Calcium channel blocker–induced chylous ascites in peritoneal dialysis

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Figure 1 | Chylous peritoneal dialysis effluent.

A 41-year-old uremic woman was presented to the emergency department with a 2-day history of painless cloudy peritoneal effluent (Figure 1). She had been undergoing continuous ambulatory peritoneal dialysis for 2 weeks due to end-stage Chinese herbs nephropathy, using 2-1 exchanges four times daily with standard 1.5% dextrose dialysate solution. On examination, physical findings were unremarkable except mild epigastric tenderness. Laboratory studies showed hemoglobin 9.6 g per 100 ml, leukocyte count $6.17 \times 10^3/\mu\text{l}$, albumin 3.9 g per 100 ml, lactate dehydrogenase 110 IU/l, and normal liver function and lipid profile. A serum-to-ascites albumin gradient was 0.8 g per 100 ml. Analyses of the turbid peritoneal effluent yielded elevated triglyceride concentration (251 mg per 100 ml) without evidence of microorganisms or cellular components,

suggestive of chylous ascites. On reviewing her current medications, she had been prescribed lercanidipine 10 mg once daily 3 days ago. After discontinuation of lercanidipine, the dialysis effluent cleared within 24 h. Re-challenge with lercanidipine provoked the same adverse reaction within 16 h. Dihydropyridine calcium channel blockers have been rarely associated with chylous ascites in peritoneal dialysis patients; the mechanism is unknown. Other reported etiologies of nontraumatic chylous effluent include abdominal neoplasm (lymphoma, solid cancers, and carcinoid tumors), cirrhosis of liver, infection (tuberculosis and filariasis), inflammation (radiation, sarcoidosis, retroperitoneal fibrosis, pancreatitis, and Whipple's disease), dilated cardiomyopathy, nephrotic syndrome, and congenital lymphatic abnormalities.