



Use of a probiotic to decrease enteric hyperoxaluria.

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BACKGROUND: Patients with inflammatory bowel disease have a 10- to 100-fold increased risk of nephrolithiasis, with enteric hyperoxaluria being the major risk factor for these and other patients with fat malabsorptive states. Endogenous components of the intestinal microflora can potentially limit dietary oxalate absorption. **METHODS:** Ten patients were studied with chronic fat malabsorption, calcium oxalate stones, and hyperoxaluria thought to be caused by jejunioileal bypass (1) and Roux-en-Y gastric bypass surgery for obesity (4), dumping syndrome secondary to gastrectomy (2), celiac sprue (1), chronic pancreatitis (1), and ulcerative colitis in remission (1). For 3 months, patients received increasing doses of a lactic acid bacteria mixture (Oxadrop, VSL Pharmaceuticals), followed by a washout month. Twenty-four-hour urine collections were performed at baseline and after each month. **RESULTS:** Mean urinary oxalate excretion fell by 19% after 1 month (1 dose per day, $P < 0.05$), and oxalate excretion remained reduced by 24% during the second month (2 doses per day, $P < 0.05$). During the third month on 3 doses per day oxalate excretion increased slightly, so that the mean was close to the baseline established off treatment. Urinary oxalate again fell 20% from baseline during the washout period. Calcium oxalate supersaturation was reduced while on Oxadrop, largely due to the decrease in oxalate excretion, although mean changes did not reach statistical significance. **CONCLUSION:** Manipulation of gastrointestinal (GI) flora can influence urinary oxalate excretion to reduce urinary supersaturation levels. These changes could have a salutary effect on stone formation rates. Further studies will be needed to establish the optimal dosing regimen.

Publication Types:

- [Clinical Trial](#)