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Escherichia coli Septic Shock Following Colonic Hydrotherapy

To the Editor:

Colonic hydrotherapy, or colonic irrigation, is a readily available procedure offered in nonmedical facilities such as spas and wellness centers.[1] Based on the concept that there are toxins in an individual's stool which cause disease, termed autointoxication, colonic cleansing became popular in the early 1900s. Falling out of favor in the 1930s after the American Medical Association refuted autointoxication and condemned the practice, colonic hydrotherapy has recently become more common.[1,2] Numerous advertised benefits include weight loss, the treatment of depression and fatigue, and the slowing of aging. Despite absent evidence of benefit, and published risks, colonic cleansing treatments are still in demand. We present a case of *Escherichia coli* septicemia secondary to colonic hydrotherapy.

Our case is a 78-year-old man with a history of hypertension, type II diabetes mellitus, and diverticulitis 8 months before admission who presented to the Emergency Department with 1 day of fever, sweats, and headache. Eight and 2 days before presentation, the patient had undergone colonic cleansing treatments at a spa, which involved per rectum instillation of large volumes of herb-infused water into the patient's colon. The patient was febrile to 40.5°C, hypotensive to 65/44 mm Hg, and had a leukocytosis of 26,000 cells/μL. His serum creatinine was 2.9 mg/dL. He improved with crystalloid resuscitation and the administration of intravenous piperacillin/tazobactam. Blood and urine cultures both recovered *E. coli*. A computed tomography scan without contrast demonstrated air in the urinary bladder. A follow-up computed tomography scan with intravenous, oral, and rectal contrast demonstrated a colovesical fistula (CVF). Piperacillin-tazobactam was changed to amoxicillin-clavulanic acid, and the patient was discharged to complete a total 14-day antibiotic course. Two months later, the patient underwent CVF repair with 10 cm of colon resected, the pathology of which showed a CVF in the setting of mild diverticulitis.

We postulate that the increased intraluminal pressure from the patient's colonic hydrotherapy sessions aided bacterial translocation into both the bladder and bloodstream. Reports of infections due to colonic hydrotherapy are limited. An outbreak of amebiasis occurred in Colorado due to contaminated equipment.[3] This outbreak led to the use of Food and Drug Administration-regulated disposable, single-use parts. Since this change in the early 1980s, the only report in the literature of an infection attributable to colonic hydrotherapy is a case of rectal perforation with polymicrobial infection in a patient who had received recent chemotherapy.[4] Previously published systematic reviews have revealed a paucity of evidence supporting the health claims of colonic cleansing, with expert opinion stating that any potential benefits are outweighed by the risks.[1,5] Our case adds to the literature on infectious risks attributable to colonic hydrotherapy, and highlights the importance of physician inquiry into patients' alternative health practices.

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