

## Editorial

# The urge to purge: colonic ‘hydrotherapy’, unproven but widely practiced, potentially dangerous, and unsupported by scientific evidence

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The only documented justifications for colon cleansing are preparation for surgery or prior to barium contrast x-rays or colonoscopy.

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A cursory Google® search using the terms ‘colon hydrotherapy’ produced 697,000 responses, Google Scholar® 2,490, and PubMed 724 responses. The internet is awash with multiple advertisements supporting the pseudoscientific theory of autointoxication and the value of colon hydrotherapy to remove presumed-harmful waste from the colon. Some rather graphic pictures are also included to impress potential customers for this non-traditional and unproven medical treatment. It is also described in one ad as ‘an alternative therapy used to cleanse, maintain, and restore optimum colon health’ [1].

A professional medical library search using Medline, Scopus, Proquest, and CINAHL databases produced 33 pages of citations from both professional and popular publications. None of these references conducted proper trials of colonic hydrotherapy for ‘autointoxication’ (personal communication, Rita Siracki, MCW reference librarian, 26 Apr 2011).

A 1997 article in the *Journal of Clinical Gastroenterology* [2] was descriptive ‘Colonic irrigation and the theory of auto-intoxication: a triumph of ignorance over science’. Another article by Dr. Seow-Choen from Singapore supports this view [3]. A more recent systematic review [4] in the *American Journal of gastroenterology* in 2009 concluded: ‘There are no methodologically rigorous controlled trials of

colonic cleansing to support the practice for general health promotion. Conversely, there are multiple case reports and case series that describe the adverse effects of colonic cleansing. The practice of colonic cleansing to improve or promote general health is not supported in the published literature and cannot be recommended at this time’.

The *Medical Letter* (TML) [5] listed reported complications of colonic irrigation, including extensive abscesses, electrolyte imbalance, and heart failure due to excessive water absorption, and intestinal perforation. The TML editors concluded ‘There is no evidence that colonic cleansing or irrigation for ‘detoxification’ is beneficial and it may be harmful’.

In his “Quackwatch” series article ‘Gastrointestinal Quackery’, Stephen Barrett, MD [6], discusses the history of these ideas dating back to the Egyptians along with the bogus practice of describing intestinal parasites, and legal actions against a number of firms, including warnings from the U.S. Food and Drug Administration (FDA). In addition, he reviews a previously reported outbreak of amebiasis in 36 people due to contaminated equipment, and six of these died following bowel perforation. Wikipedia [7] also has a recently-updated (21 Apr 2011) article criticizing colon cleansing, along with other references.

The American Cancer Society [8] also concludes ‘Available evidence does not support claims that colon therapy is effective in treating cancer or any other disease’. They also disparage the use of coffee enemas as useless in cancer treatment. A recent

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survey in Thailand [9] of 1,931 patients attending surgical clinics found that 91 (4.7%) had 'colonic detoxification', with a complication rate of 2.19%, mainly due to rectal bleeding. Coffee was the most frequently used agent for the irrigation (90.1%).

Intestinal perforation has been documented on several occasions in inflammatory bowel disease (IBD). One study from Scandinavia [10] surveyed 3,175 patients from a multinational survey. Among 1,928 patients with ulcerative colitis, perforation was documented in only five (0.3%), but in contrast 19 of 1,247 (1.5%) patients with Crohn's disease reported perforations. No mention was made of colon irrigation as a cause of perforation in this series.

The U.S. FDA has defined colonic irrigation machines to be Class III devices [6, 8], meaning they cannot legally be marketed, except for medically needed colon cleansing (as before contrast x-rays or colonoscopy). Of course, these rules do not apply outside the U.S., thus making it possible for profiteering, unscrupulous 'alternative' providers to fraudulently promote such nonsense. A similar issue has previously been described in this journal in the example of Stem Cell Tourism [11].

One possible use of carefully supervised colonic irrigation in combination with antibiotics for radiation proctitis has been described in a pilot study group of 12 patients from Thailand [12]. No complications occurred in this group. However, there were no controls, and the authors state that further study is warranted.

Three other reports [13-15] of unrandomized, uncontrolled cases series describe potential uses of medically supervised colonic irrigation. The first from Denmark [13] describes outcomes and safety of transanal irrigation for treatment of severe constipation and fecal incontinence. After a mean follow-up of 21 months, 163 of 348 patients had a 'successful outcome'. The best results were in patients with neurogenic bowel dysfunction. Two nonfatal bowel perforations occurred in 110,000 irrigations.

The second report, from the same institution in Denmark [14] describes results of colonic irrigation in 211 patients with neurogenic bowel dysfunction. Again, 'successful outcome' was reported for 46% of patients, with one non-fatal perforation in 50,000 irrigations.

The third report [15], from the Netherlands, describes colonic irrigation for fecal incontinence after low anterior resection in 30 patients. Data from

26 patients suggested possible benefit in a few. Five patients discontinued the treatment because of side effects, making the study difficult to interpret.

In summary, colonic hydrotherapy, even under medical supervision, is of questionable value and has potential serious complications. It should not be encouraged by clinicians. Patients who seek medical advice from their physicians need careful evaluation and education regarding the risks of this unproven mode of treatment.

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