

Life-threatening Perineal Gangrene from Rectal Perforation Following Colonic Hydrotherapy: A Case Report

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Abstract

Alternative medicine is widely publicised in Singapore. To date there are few reports of complications arising as a result of such treatments. However, there is no legislation as yet governing alternative medicine practitioners. We present an unusual case of a patient who developed life-threatening perineal gangrene as a result of rectal perforation following colonic hydrotherapy.

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Introduction

Alternative medicine has become widely publicised throughout the world. Alternative medicine practitioners (AMPs), which include Oriental medicine doctors, traditional Chinese medicine practitioners, naturopaths and Ayurvedic medicine practitioners, tout the ability to heal many diseases using treatments which are unconventional and of questionable scientific basis. Techniques employed by AMPs may include procedures and pharmaceutical products which do not undergo rigorous testing and have undetermined and little understood adverse effects.

The gastrointestinal tract is regarded by many AMPs as a critical area of the body. It is perceived that the alimentary tract often fails to receive the appropriate nutrients or becomes a reservoir of accumulated toxins and becomes a potential source of disease. Colonic hydrotherapy is one of the many techniques recommended for toxin removal and health rejuvenation. We present a case of a patient who suffered a rectal perforation following colonic irrigation administered by a traditional practitioner.

Case Report

A 54-year-old diabetic woman had consulted a traditional practitioner for long-standing and frequent attacks of migraine and gastric discomfort. This was diagnosed to be due to accumulated toxins within her colon and she was recommended colonic cleansing. Six days prior to admission to hospital, she underwent colonic hydrotherapy using the apparatus as shown in

Figure 1. The colon tip of the instrument, which is made of hard plastic, was inserted into the rectum and water infused under pressure. She experienced malaise and lethargy after the treatment. She returned to the practitioner and was treated with herbs and a body massage. Her condition worsened and her husband noticed some abdominal distension and bruising. She subsequently became disoriented and was brought to the emergency room in critical condition.

Upon presentation, she was found to have a systolic blood pressure of 50 mmHg. She was intubated, resuscitated and taken directly to the surgical intensive care unit. Clinical examination revealed abdominal distension. Bruising was observed over the lower half of the abdomen and left lower limb. Perianal erythema and induration with crepitus was noted. Per rectal examination revealed a finger-sized defect in the posterior wall.

Serum biochemistry revealed diabetic ketoacidosis and disseminated intravascular coagulopathy from severe sepsis. Abdominal radiographs showed distended bowel loops but no pneumoperitoneum. Computed tomographic (CT) scan confirmed a perforation at the anorectal junction with ischiorectal air and inflammation of the right iliac fossa region (Fig. 2).

Emergency surgery was performed. A 0.5-cm perforation in the posterior rectal wall was noted 2 cm from the anal verge. Extensive areas of necrotising fasciitis were seen in the perineum with extension into the presacral space, mesorectum and over the anterior abdominal wall. Extensive debridement to the anterior abdominal wall and an abdominoperineal resection was performed

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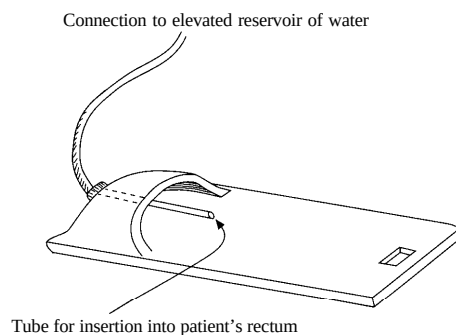


Fig. 1. Artist's depiction of colonic hydrotherapy board.

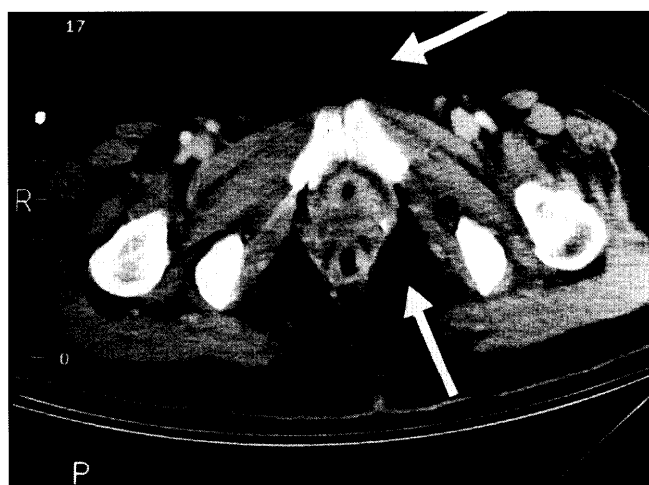


Fig. 2. CT scan of the pelvis. Note extensive inflammatory changes and air in the perineum (arrows).

and the perineal wound was left open. Histological examination showed microabscesses and extensive necrosis of the pelvic floor muscles, mesorectum and anterior abdominal wall.

Postoperative recovery was stormy but she gradually improved with repeated debridement. She was discharged six weeks after admission and was then able to ambulate with support. Her perineal and abdominal wounds required a further three months to heal completely.

Discussion

Peritonitis secondary to large bowel perforation carries a high mortality rate.⁷ Overall mortality rates of up to 35% have been reported for such patients who have undergone some form of surgery.^{2,3} Resection of the affected segment with faecal diversion is often necessary and life-saving in critically ill patients with left-sided colonic lesions.⁷ The more common conditions which require such measures include trauma-related large bowel injuries, tumours of the colon and perforated diverticulitis.

Rectal perforation from hydrotherapy is highly unusual and this is the first reported case. One similar injury

was caused by sitting over a public water fountain.⁴ This injury was particularly catastrophic because it occurred in unprepared bowel and the high water pressure drove the faeces through the perforation resulting in widespread contamination and sepsis. This patient however, suffered an extraperitoneal perforation, which is a very unusual complication. Due to the nature of this injury, the initial symptoms and signs were minor, making the diagnosis extremely difficult. She subsequently developed extensive necrosis of the retroperitoneal tissues, the pelvic floor and the perineum and was admitted in fulminant septicaemia. Treatment required resection of the affected bowel as well as aggressive debridement of all affected areas resulting in massive tissue loss and significant morbidity. Long-term sequelae included permanent bladder dysmotility, residual weakness of the quadriceps muscles from neurological damage and a permanent stoma.

In 1996, The National Library of Medicine and the Medical Subject Headings Term Working Group, Office of Alternative Medicine, National Institutes of Health classified alternative medicine as "an unrelated group of non-orthodox therapeutic practices, often with explanatory systems that do not conform to conventional biomedical knowledge". Despite the lack of scientific evidence, there was optimism that in time, alternative medicine would find acceptance by the more "conventional" medical community.

Widespread media exposure and the explosion of information technology globally has helped publicise and popularise these alternative medicine practices. While much information is available on the purported advantages of colonic hydrotherapy, there is often little stated about its dangers. Moreover, with increasing popularity and minimal regulation, many alternative medicine practices are sprouting. These practitioners are offering new modes of treatment modalities without adequate training or certification. They may not even be aware of the possible complications that could arise, much less equipped to deal with them. The consequences, sadly, are borne by their patients.

One major reason for these occurrences is the lack of legislation or supervision for the practice of traditional or alternative medicine in Singapore. Unlike the medical and dental professions, there are no guidelines governing indications, minimum standards of care or certification of AMPs. At present, there is no requirement for registration of AMPs and hence no record of their numbers or even who they are. There is also the issue of their legal responsibility to their patients. Malpractice suits involving AMPs are virtually unheard of. It is quite conceivable that these practitioners may be prescribing treatments they may neither be entirely familiar with or adequately trained to administer. The Ministry of Health has taken measures to monitor the complications of

alternative medicine practices but no clear audit process is in place. While doctors can be censured or deregistered, no such action can be taken against AMPs. It is the authors' opinion that these issues need to be addressed in a more consistent, coherent and constructive manner.

Conclusion

Alternative medicine practices can result in serious and life-threatening complications.

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