



**Title page****Submission title : circular rectal lesion****Authors names:** Martin Wilhelmi, MD, Sylvan Loetscher, MD, Peter Netzer, MD

Authors affiliation:

**Dr.med. Martin Wilhelmi** – 1. Central-Praxis Gastroenterologie, Zürich, Switzerland

2. Gastrozentrum Netzer AG, Lindenhofspital Bern, Switzerland

**Dr.med. Sylvan Loetscher** – Institut für Pathologie, Länggasse, Bern, Switzerland**PD Dr.med. Peter Netzer** – Gastrozentrum Netzer AG, Lindenhofspital Bern, Switzerland**Corresponding author:**

Dr. med. Martin Wilhelmi

Central-Praxis Gastroenterologie Zürich

Weinbergstrasse 26

8001 Zürich

Email: [martin.wilhelmi@bluewin.ch](mailto:martin.wilhelmi@bluewin.ch)

Dr.med.Martin Wilhelmi performed the examination of the patient and wrote the manuscript

No relevant conflict of interest exist for this author

Dr.med. Sylvan Loetscher performed histology examination and delivered the histology pictures

No relevant conflict of interest exist for this author

PD Dr.med. Peter Netzer helped writing the manuscript

No relevant conflict of interest exist for this author

## Circular rectal lesion

Wilhelmi M.<sup>1,2</sup>, Loetscher S.<sup>3</sup>, Netzer P<sup>1</sup>

1 Gastrozentrum Netzer AG, Lindenhofspital Bern, Switzerland

2 Central-Praxis Gastroenterologie, Zürich, Switzerland

3 Institute for pathology, Laenggasse, Bern, Switzerland

**Question:** A 56-year-old woman attended a second screening colonoscopy after the first procedure involved polypectomy of three tubular adenomas in the sigmoid colon five years earlier. Maternal family history was positive for rectal carcinoma at the age of 55; no other family members were diagnosed with gastrointestinal malignancies. Except for mild irritable bowel syndrome (IBS)-like symptoms with abdominal bloating, constipation and rare episodes of abdominal cramps, the patient did not suffer any further complaints. The physical examination was normal, and the patient was not taking any form of medication. The colonoscopy revealed a 2 x 3 cm circular lesion in the distal rectum, which was best seen under narrow band imaging (NBI)-light (Figures 1 and 2); biopsies were taken for histological analysis. The quality of the colon preparation was insufficient. No additional lesions were detected upon completion of the colonoscopy. What is the diagnosis?

**Answer:** Histology of the circular rectal lesion revealed acute, putrid and erosive-ulcerative inflammation with bacterial infection (Figures 3 and 4, H&E, medium-power view and overview). No malignancy was detected. Proctoscopy carried out six weeks later showed complete healing of the circular lesion. After further discussions with the patient, she explained that she had undergone colonic hydrotherapy (CHT) one day before the colonoscopy instead standard preparation for colonoscopy. We hypothesize that a mechanical irritation of the rectum was caused by the CHT catheter.

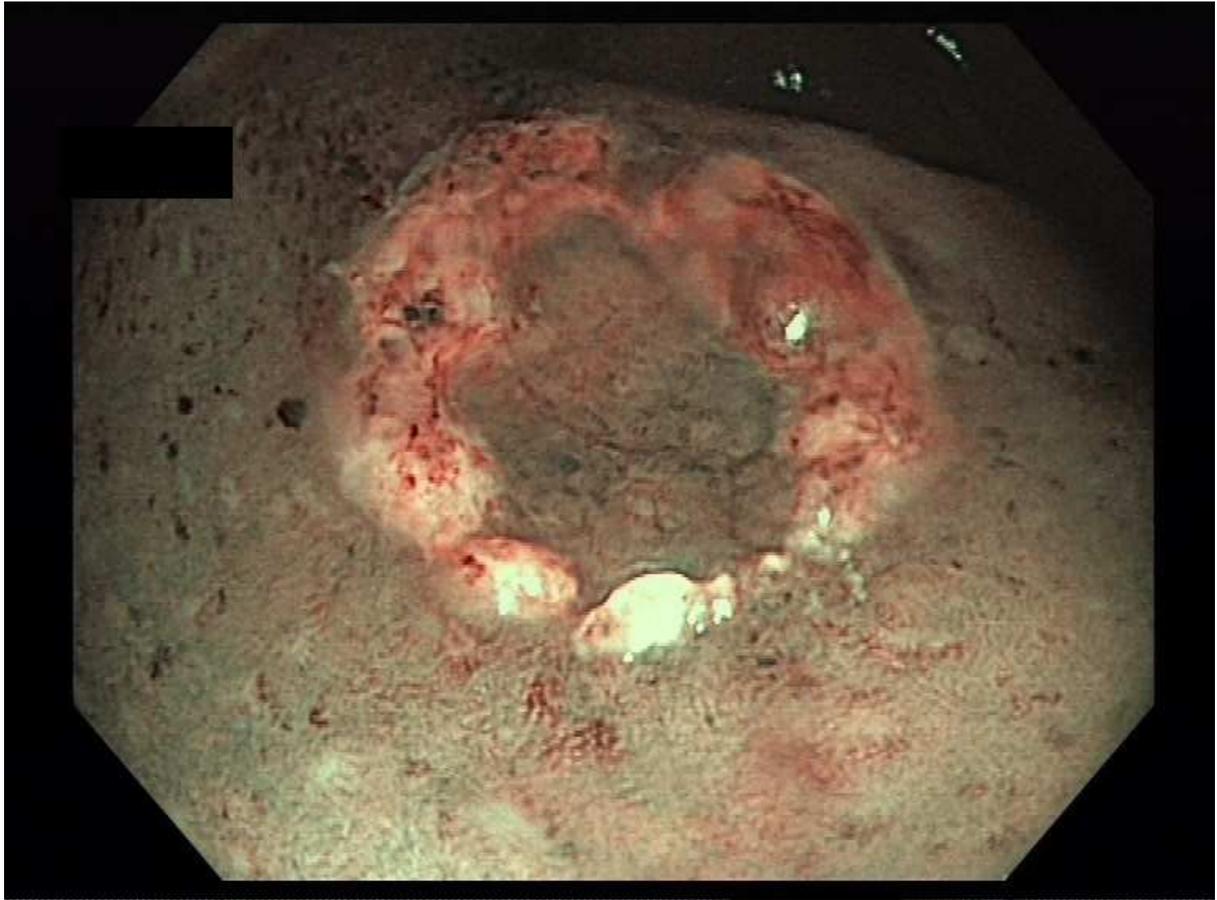
Colonic hydrotherapy (CHT) is a technique widely used by alternative medicine practitioners to treat constipation and is believed to be a form of “detoxification” therapy; there is no evidence of its benefit (1). During CHT, large amounts of water — sometimes up to 16 gallons (about 60 liters) — and possibly other substances such as herbs or coffee, are flushed through the colon. There are a number of case reports and case series that describe the adverse effects of CHT. Risks include dehydration, bowel perforation, changes in electrolyte levels and infection (2). Comparative studies focusing on the effect of CHT as a preparation method prior to colonoscopy versus the use of standard polyethylene glycol electrolyte lavage (PEG-EL) solutions highlighted the superiority of the latter, in terms of significantly better colonic cleanliness, fewer adverse effects and increased examiner satisfaction. Our case demonstrates the potential harmful effect of CHT.

### References

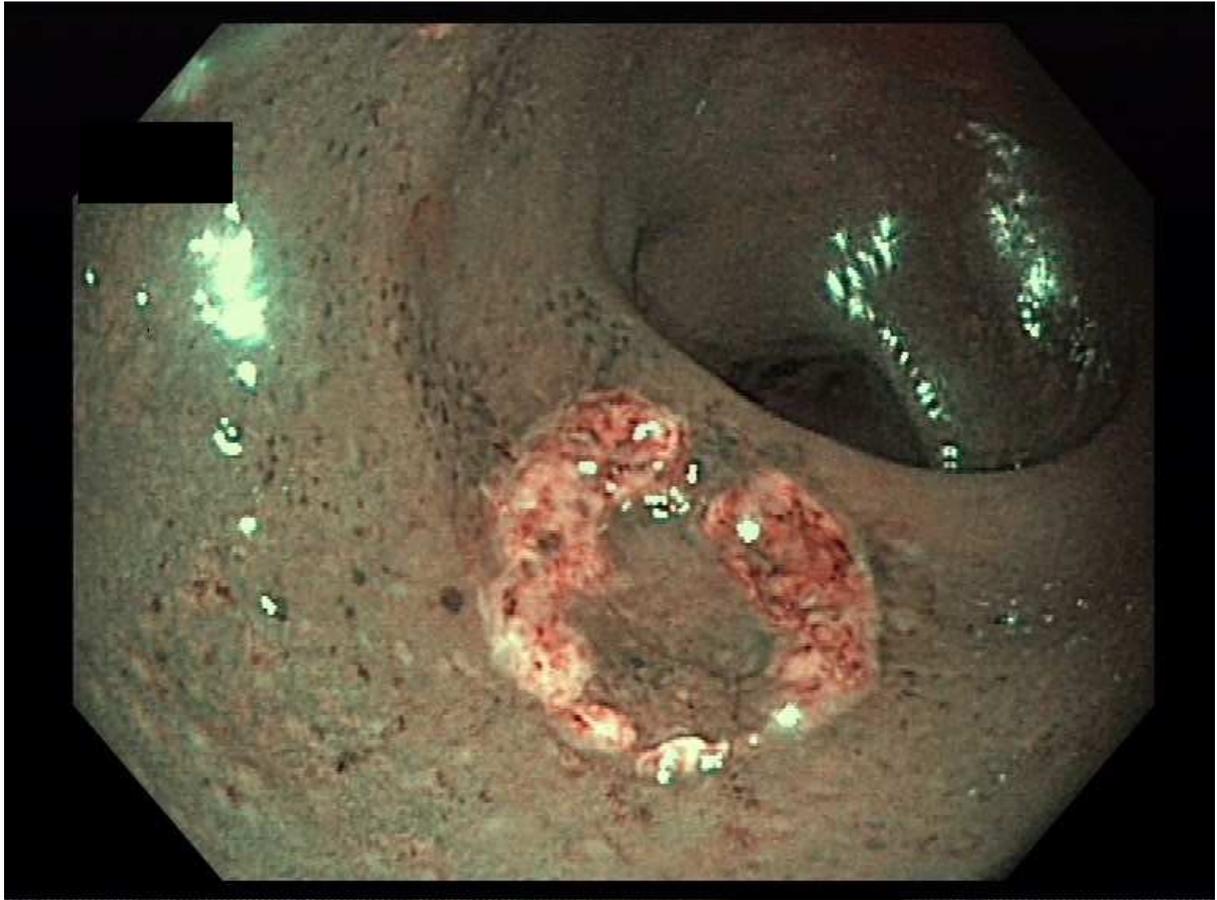
1 Clinical effects of colonic cleansing for general health promotion: a systematic review, Acosta RD, Cash BD, *Am J Gastroenterol.* 2009 Nov;104(11):2830-6

2 *Escherichia coli* septic shock following colonic hydrotherapy. Dore M, Gleeson T. *Am J Med.* 2015 Oct;128(10):e31.

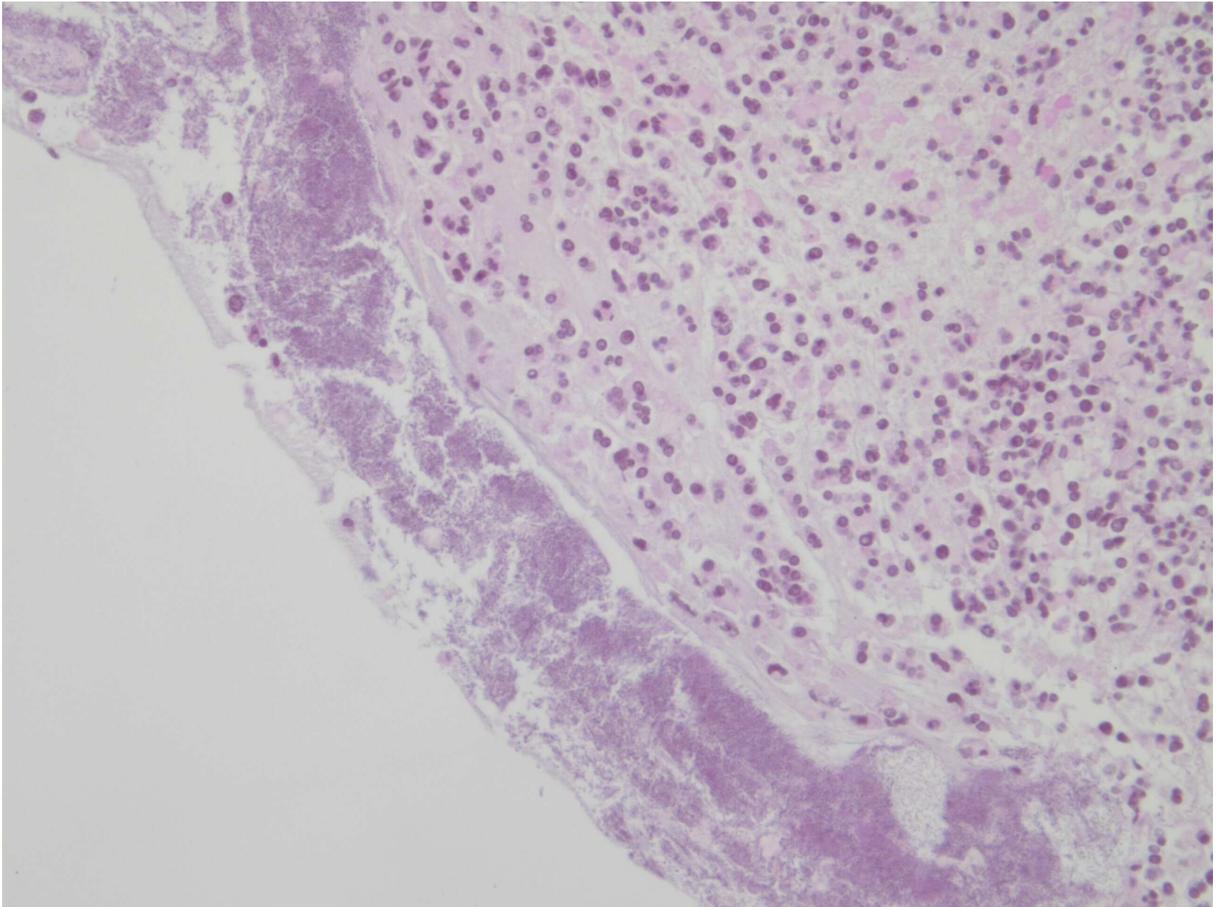
3 Polyethylene Glycol Electrolyte Lavage Solution versus Colonic Hydrotherapy for Bowel Preparation before Colonoscopy: A Single Center, Randomized, and Controlled Study, Yan Cao, Kai-Yuan Zhang, Jiao Li et al., *Gastroenterol Res Pract.* 2014; 2014: 541586.



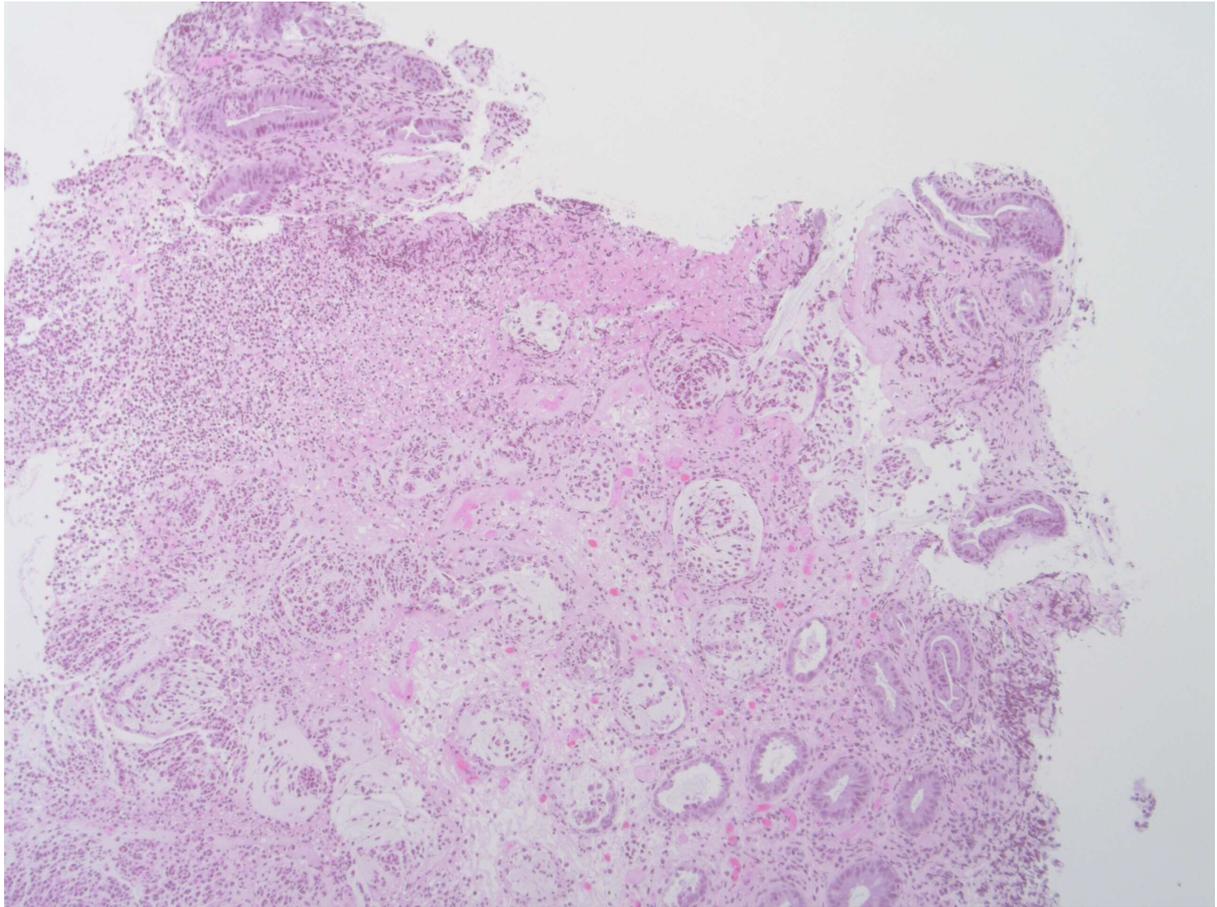
ACCEPTED MANUSCRIPT



ACCEPTED MANUSCRIPT



ACCEPTED MANUSCRIPT



ACCEPTED MANUSCRIPT