All that is red is not blood!

A 62-year-old woman presented for screening colonoscopy after a 24-hour clear-liquid diet and Colyte preparation. Frank blood was noted from the point of colonoscope insertion up to the terminal ileum (Fig. 1a). Aspirate tested negative with the hemoccult card. Using narrow-band imaging (NBI) the “red liquid” appeared cyan blue (Fig. 1b). Upon further questioning during recovery, the patient reported eating red jello.

NBI is an alternative light-wavelength capture system that filters light in the visible spectrum, except for narrow bands in the blue and green wavelengths (415 nm and 540 nm, respectively) [1] (Fig. 3). The peak absorption spectrum of red dye is 502–518 nm and appears as a cyan color whereas oxyhemoglobin is absorbed at 415 nm and appears as dark maroon. As shown in Figs. 1a and 2a, red jello and post-polypectomy bleeding appeared indistinguishable under white light. Even the most sophisticated of tools, NBI, has demonstrated here a simple clinical use in differentiating between blood and other

---

**Fig. 1** Screening colonoscopy following ingestion of red jello. a Red liquid in colon lumen seen under white light. b Under the blue light of narrow-band imaging, the red dye in the jello (dye No. 40) appears blue–green.

**Fig. 2** Bleeding from recent polypectomy site. a Seen under white light. b Seen under blue light; note the dark maroon color of the blood.

---

**Fig. 3** Maximum absorptive capacity of hemoglobin at a wavelength of 415 nm. Adapted with permission from Olympus Europe (www.olympus-europa.com).

---

Soloman A et al. All that is red is not blood!... Endoscopy 2010; 42: E229–E230
red substances. We suspect that this is not the first or the last case of “red jello stool” [2].

Competing interests: None

References
1 Kuznetsov K. Narrow-band imaging: potential and limitations. Endoscopy 2006; 38: 76–81

A. Soloman, M. Merheb, D. R. Ferguson
Division of Gastroenterology, MetroHealth Medical Center, Case Western University, Cleveland, Ohio, USA

Bibliography
Endoscopy 2010; 42: E229 – E230
© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author
A. Soloman, DO
Division of Gastroenterology, MetroHealth Medical Center, Case Western University
2500 MetroHealth Dr.
Cleveland OH 44109
USA
Fax: +1-216-778-4873
asoloman@metrohealth.org