A Couple's Colitis

David Phillip Serota, MD, Stephanie Halvorson, MD, and Sima Desai, MD

Department of Medicine, Oregon Health and Science University, Portland, OR, USA.

KEY WORDS: Infectious disease; Gastroenterology; Public health; Infectious diarrhea; Colitis.

J Gen Intern Med 30(12):1889–90

DOI: 10.1007/s11606-015-3292-8

© Society of General Internal Medicine 2015

A 32-year-old woman was admitted with 4 days of bloody diarrhea, abdominal pain, leukocytosis, and fever following fast food consumption and use of methamphetamine. An abdominal CT scan revealed continuous colonic mural thickening from the cecum to the splenic flexure (Fig. 1). Stool cultures for bacteria, ova and parasites, and fecal leukocytes were negative. Her symptoms resolved with supportive care, and on the day of discharge, her partner presented with identical symptoms (Fig. 2). His stool cultures grew shiga toxin 2-producing *E. coli*, serogroup O157:H7 (STEC). Based on his positive stool culture and the presence of diffuse colitis on both scans, a final diagnosis of STEC was given to both patients.

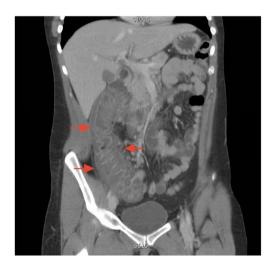


Fig. 1 Coronal section of abdominal CT scan of the woman (first patient), with arrows demonstrating colonic mucosal thickening with fat stranding at the ascending colon, consistent with colitis.

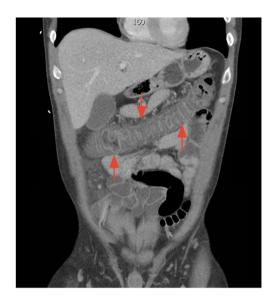


Fig. 2 Coronal section of abdominal CT scan of the man (first patient's partner), with arrows demonstrating colonic mucosal thickening with fat stranding at the transverse colon, consistent with colitis.

STEC is a common cause of hemorrhagic colitis, usually occurring in food-borne outbreaks. Among patients diagnosed with STEC, 6 % subsequently develop hemolytic uremic syndrome. Microbiologic detection of STEC is highly dependent on obtaining stool cultures within 6 days of symptom onset, and the presence of fecal leukocytes indicates a higher yield sample. The gold standard for diagnosis is stool culture on sorbitol MacConkey agar, followed by latex agglutination. ELISA, direct toxin assays, and toxin PCR methods all provide rapid diagnosis, with comparable sensitivity and specificity (77–96 % sensitivity, 98–99 % specificity).

Conflict of Interest: The authors declare that they do not have a conflict of interest.

Corresponding Author: David Phillip Serota, MD; Department of Medicine, Oregon Health and Science University, Portland, OR, USA (e-mail: serota@ohsu.edu).

REFERENCES

- Gould LH, Demma L, Jones TF, Hurd S, Vugia DJ, Smith K, Shiferaw B, Segler S, Palmer A, Zansky S, Griffin PM. Hemolytic uremic syndrome and death in persons with Escherichia coli O157:H7 infection, foodborne diseases active surveillance network sites, 2000-2006. Clin Infect Dis. 2009;49(10):1480-5. doi:10.1086/644621.
- Tarr PI, Neill MA, Clausen CR, Watkins SL, Christie DL, Hickman RO. Escherichia coli O157:H7 and the hemolytic uremic syndrome: importance of early cultures in establishing the etiology. J Infect Dis. 1990;162(2):553–6.
- Gerritzen A, Wittke JW, Wolff D. Rapid and sensitive detection of Shiga toxin-producing Escherichia coli directly from stool samples by real-time PCR in comparison to culture, enzyme immunoassay and Vero cell cytotoxicity assay. Clin Lab. 2011;57(11–12):993–8.