

**Renee Hsia, MD**  
**Alice Chiao, MD**  
**Joanna Law Courter, MD**

From the Stanford-Kaiser Emergency Residency, Palo Alto, CA (Hsia, Chiao); and the Emergency Department, Kaiser Permanente Santa Clara Medical Center, Santa Clara, CA (Law Courter).

0196-0644/\$-see front matter

Copyright © 2007 by the American College of Emergency Physicians.

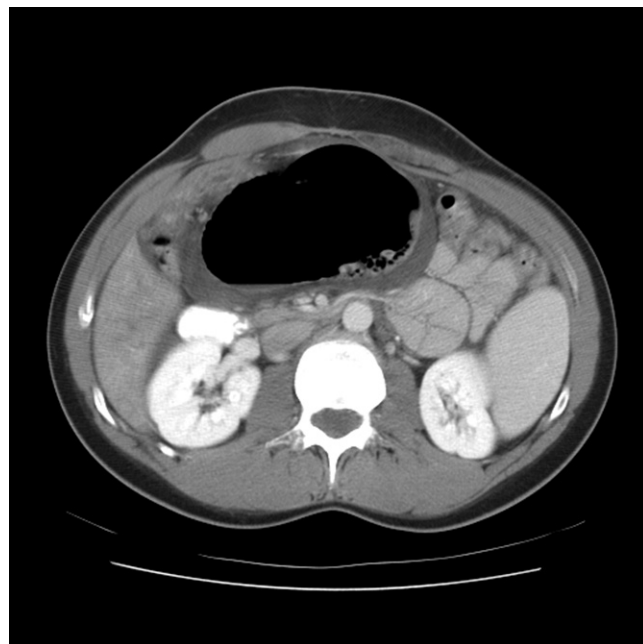
doi:10.1016/j.annemergmed.2006.04.020



**Figure 1.** Anteroposterior scout film of CT abdomen and pelvis.

[Ann Emerg Med. 2007;49:272.]

A 31-year-old woman presented with acute onset of crampy suprapubic and lower abdominal pain associated with vomiting and loose brown stools. She denied hematemesis, urinary symptoms, or fever. The patient had no medical problems and no previous surgeries. She appeared extremely uncomfortable. Vital signs and physical examination results were normal, except for mild tenderness to palpation over the lower half of her abdomen bilaterally, with no peritoneal signs. She was sent for computed tomography (CT) of the abdomen and pelvis.



**Figure 2.** Transverse CT image of abdomen showing dilated right colon with thickened wall. Used with permission of Joanna Law Courter, MD, Emergency Department, Kaiser Permanente Santa Clara Medical Center, Santa Clara, CA.

*For the diagnosis and teaching points, see page 281.*

*To view the entire collection of Images in Emergency Medicine, visit [www.annemergmed.com](http://www.annemergmed.com)*

43. Moskop J: A moral analysis of military medicine. *Mil Med.* 1998; 163:76-79.
44. International Committee of the Red Cross. Geneva Conventions HV (1949) and additional protocols I and II (1977) [International Committee of the Red Cross Web site]. Available at: <http://www.icrc.org/Web/Eng/siteeng0.nsf/html/genevaconventions>. Accessed June 21, 2006.
45. American College of Emergency Physicians. Disaster medical services (ACEP policy statement, approved June 2000) [American College of Emergency Physicians Web site]. Available at: <http://www.acep.org/webportal/PracticeResources/PolicyStatements/ems/dismedsvc.htm>. Accessed June 21, 2006.
46. Kennedy K, Aghababian RV, Gans L, et al. Triage: techniques and applications in decisionmaking. *Ann Emerg Med.* 1996;28:136-144.
47. World Medical Association. Statement on Medical Ethics in the Event of Disasters. Adopted by the 46th Stockholm, Sweden: WMA General Assembly, September 1994. Available at: <http://www.wma.net/e/policy/d7.htm>. Accessed June 21, 2006.
48. Super G. *START: A Triage Training Module*. Newport Beach, CA: Hoag Memorial Hospital Presbyterian; 1984.

## IMAGES IN EMERGENCY MEDICINE

*(continued from p. 272)*

### DIAGNOSIS:

*Cecal volvulus.* The CT revealed a markedly dilated right colon with a thickened, irregular wall and a small amount of free fluid and free air (Figures 1 and 2). Cecal volvulus was confirmed during surgery, and ileocectomy was performed. The patient recovered well. Unlike sigmoid volvulus, which occurs more often in elderly patients, incidence of cecal volvulus peaks at age 25 to 35 years. It is associated with hypofixation of the cecum and other parts of the intestine to the posterior abdominal wall,<sup>1</sup> which results in hypermobility, often around the ileocecal artery's mesenteric pedicle, and can be provoked by neoplasms, inflammation, or previous surgery. Marathon runners seem to have higher rates of cecal volvulus, possibly because of a thin elastic mesentery. The characteristic "coffee bean" finding is not always seen on plain radiograph. Expedient evaluation is essential because mortality is 10% to 15% if the bowel is viable and up to 40% if the bowel has infarcted. Although successful reduction by barium enema has been reported, there are higher rates of perforation, and the standard of care is almost always operative, with either cecopexy or right-sided colectomy.<sup>2</sup>

### REFERENCES

1. Bitterman RA, Peterson MA. Volvulus. In: Marx JA, Hockberger RS, Walls RM, eds. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 5th ed. St. Louis, MO: Mosby; 2002:1335.
2. Kahi CJ, Rex DK. Bowel obstruction and pseudo-obstruction. *Gastroenterol Clin North Am.* 2003;32:1229-1247.