### IMAGES IN EMERGENCY MEDICINE

Gastrointestinal



# Abdominal pain after a food crawl

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#### KEYWORDS

bowel, bowel perforation, gastric distension, gastric perforation

### 1 | PATIENT PRESENTATION

A 28-year-old female presented to the emergency department with a 3-day history of abdominal pain after a food crawl. Her abdomen was significantly distended with a pulse of 120 beats/min and temperature of 37.9°C. She proceeded to leave against medical advice and returned



FIGURE 1 A coronal computed tomography image of the abdomen and pelvis with contrast, showing gastric distension (star) with free air under the diaphragm (arrow).



FIGURE 2 An axial computed tomography image of the abdomen with contrast, showing gastric perforation (arrow) and large-volume peritoneal fluid (star).

the next day with a taut abdomen and peritoneal signs. Her pulse was 156 beats/min with worsening hypoxia and declining mental status. She was intubated and started on broad-spectrum antibiotics. Computed tomography (CT) imaging was obtained (Figures 1 and 2).

#### **DIAGNOSIS: GASTRIC PERFORATION**

CT revealed gastric perforation with notable free air and abbdominopelvic ascites. She was taken to the operating room for an

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exploratory laparotomy where an estimated 16L of dense food particles were removed. Her clinical course included a month-long intensive care unit (ICU) stay involving multiple abdominal washouts until her abdomen could be closed.

Bowel perforation is a life-threatening condition, with a mortality rate of 30% despite improved medical and surgical interventions. <sup>1</sup> There are four mechanisms that can lead to bowel perforation: ischemia, infection, erosion, and physical disruption. <sup>2</sup> Mainstays of management remain consistent in the literature, involving hemodynamic management and early initiation of broad spectrum antibiotics, with most cases progressing to surgical exploration and repair. <sup>3</sup>

#### CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

#### REFERENCES

- Shin R, Lee SM, Sohn B, et al. Predictors of morbidity and mortality after surgery for intestinal perforation. *Anna Coloproctol*. 2016;32(6):221. doi:10.3393/ac.2016.32.6.221
- Tanner TN, Hall BR, Oran J. Pneumoperitoneum. Surg Clin North Am. 2018;98(5):915-932. doi:10.1016/j.suc.2018.06.004
- 3. Jones MW, Kashyap S, Zabbo CP. *Bowel Perforation*. StatPearls Publishing; 2023. https://www.ncbi.nlm.nih.gov/books/NBK537224/

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