

A GLOBAL JOURNAL OF EMERGENCY MEDICINE

IMAGES IN EMERGENCY MEDICINE

General Medicine



A Woman With Painful Umbilicus

Khrongwong Musikatavorn MD^{1,2}, Jutamas Saoraya MD, PhD¹

¹Department of Emergency Medicine, Faculty of Medicine, Chulalongkorn University and King Chulalongkorn Memorial Hospital, The Thai Red Cross Society, Bangkok, Thailand

Correspondence

Khrongwong Musikatavorn, MD, Department of Medicine, Chulalongkorn University, 1873, Rama 4 Road, Patumwan, Bangkok 10330, Thailand. Email: Khrongwong.m@chulahospital.org

Received: February 16, 2025 Accepted: February 25, 2025

https://doi.org/10.1016/j.acepjo.2025.100107

Keywords: umbilical hernia, enterocutaneous fistula

1 PATIENT PRESENTATION

A 57-year-old woman with type 2 diabetes mellitus and morbid obesity (body mass index 53.2 kg/m²) presented to the emergency department with a 4-day history of intermittent pain and swelling of the umbilicus. One day prior to presentation, the pain worsened, and a foul-smelling yellowish discharge was noted. The patient also reported an occasional, painless bulging of the umbilicus over the past year. She denied any history of abdominal surgery or recent trauma. On physical examination, her vital signs were within normal limits. Abdominal examination revealed tenderness and erythema over the umbilical area, with fecal content leaking from the site (Fig 1). Computed tomography of the abdomen confirmed the diagnosis.

2 DIAGNOSIS: INCARCERATED UMBILICAL HERNIA WITH SPONTANEOUS ENTEROCUTANEOUS FISTULA

The computed tomography scan revealed a strangulated umbilical hernia (UH) and a perforated bowel loop with skin



FIGURE 1. Erythematous skin over the swollen umbilicus with a leakage of fecal content.

Supervising Editor: James Fletcher, \mbox{MD}

© 2025 The Author(s). Published by Elsevier Inc. on behalf of American College of Emergency Physicians. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

JACEP Open 2025;6:100107. JACEPOpen.com 1 of 2

²Department of Medicine, Faculty of Medicine, Chulalongkorn University and King Chulalongkorn Memorial Hospital, The Thai Red Cross Society, Bangkok, Thailand

JACEP OPEN



FIGURE 2. Computed tomography of the abdomen demonstrating a strangulated umbilical hernia (red arrow). The short yellow arrow indicates skin disruption, consistent with a perforated bowel communicating with the skin, indicative of an enterocutaneous fistula.

disruption, consistent with an enterocutaneous fistula (Fig 2). An emergency exploratory laparotomy was performed, including an ileocecectomy and closure of the abdominal wall defect. After surgery, she developed a surgical wound infection but was successfully treated and discharged following a 36-day hospitalization.

UHs are common in adults.¹ Although nonoperative management of UHs can be safe, the risk of complications leading to emergency department visits remains significant.^{2,3} Incarcerated UH with spontaneous enterocutaneous fistula is an exceptionally rare complication. To prevent such complications, surgical repair is recommended for patients with symptomatic or large UHs, as emergency surgical intervention

is associated with poorer outcomes compared with elective procedures. 4,5

FUNDING AND SUPPORT

By *JACEP Open* policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article as per ICMJE conflict of interest guidelines (see www.icmje.org). The authors have stated that no such relationships exist.

CONFLICT OF INTEREST

The authors had no conflict of interest to declare.

ORCID

Khrongwong Musikatavorn MD (D) https://orcid.org/0000-0002-5746-0724

REFERENCES

- Nieuwenhuizen J, Kleinrensink GJ, Hop WC, Jeekel J, Lange JF. Indications for incisional hernia repair: an international questionnaire among hernia surgeons. *Hernia*. 2008;12(3):223-225.
- Leubner KD, Chop WM Jr, Ewigman B, Loven B, Park MK. Clinical inquiries. What is the risk of bowel strangulation in an adult with an untreated inguinal hernia? J Fam Pract. 2007;56(12):1039-1041.
- Holihan JL, Flores-Gonzalez JR, Mo J, Ko TC, Kao LS, Liang MK. A prospective assessment of clinical and patient-reported outcomes of initial non-operative management of ventral hernias. World J Surg. 2017;41(5):1267-1273.
- **4.** Henriksen NA, Montgomery A, Kaufmann R, et al. Guidelines for treatment of umbilical and epigastric hernias from the European Hernia Society and Americas Hernia Society. *Br J Surg.* 2020;107(3):171-190.
- Helgstrand F, Rosenberg J, Kehlet H, Bisgaard T. Outcomes after emergency versus elective ventral hernia repair: a prospective nationwide study. World J Surg. 2013;37(10):2273-2279.

How to cite this article: Musikatavorn K, Saoraya J. A Woman With Painful Umbilicus. JACEP Open. 2025;6:100107.

https://doi.org/10.1016/j.acepjo.2025.100107

2 of 2 MUSIKATAVORN AND SAORAYA