

## IMAGES IN EMERGENCY MEDICINE

## Infectious Disease

# A woman with flank pain and swelling

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## 1 | CASE PRESENTATION

A 51-year-old woman presented to the emergency department complaining of left flank pain and swelling that was radiating to her lower abdomen for the past 2 days. Past surgical history was significant for gastric bypass, hernia repair with mesh, and cholecystectomy. On physical examination, vital signs were within normal limits, and an abdominal examination showed significant swelling, tenderness, and erythema in the lower abdominal wall extending to the left flank area. A tender, erythematous, and fluctuant 5 × 6 cm mass was noted in the left flank area. Computed tomography scan of the abdomen demonstrated a large anterior abdominal wall fluid collection in the muscular fascia containing a moderate amount of gas measuring 31.4 cm × 5.7 cm × 21.9 cm that extended through the left anterolateral abdominal wall musculature into the left flank subcutaneous soft tissues as well as into the left thoracic abdominal body wall musculature between the fifth and 10th ribs (Figures 1 and 2).



**FIGURE 1** Axial view of large, 31.4 cm × 5.7 cm × 21.9 cm fluid collection (arrows) in the anterior and anterolateral areas of the abdominal wall with a moderate amount of gas



**FIGURE 2** Sagittal view at the splenic flexure demonstrating large abdominal fluid collection (arrow) with a moderate amount of gas extending into the abdominal and thoracic muscles

## 2 | DIAGNOSIS

### 2.1 | Necrotizing fasciitis of the abdominal wall

Necrotizing soft tissue infection (NSTI) is a rare diagnosis with an incidence of 0.3–5 per 100,000 and a mortality rate of 20%–30%. It is a clinical diagnosis that relies heavily on history and physical examination.<sup>1</sup> NSTI should be considered in patients with severe pain out of proportion, progressing swelling and erythema, and unstable vital signs.<sup>2</sup> Treatment consists of early surgical consult and broad-spectrum antibiotics.<sup>3</sup> The patient underwent emergent surgery that revealed a small bowel enterocutaneous fistula causing the NSTI. The extent of the injuries was deemed not survivable.

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## CONFLICT OF INTEREST

The authors declare no conflict of interest.

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