

# Emphysematous gastritis with concomitant portal venous air

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**Mohamed Hajri, Sahir Omrani, Wael Ferjaoui, Rached Bayar**

Department of General surgery, Mongi Slim University Hospital, Faculty of medicine of Tunis, Tunisia

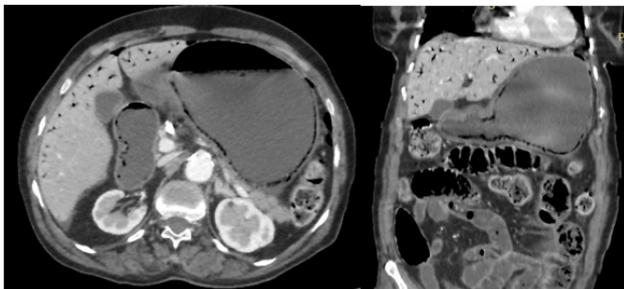
**Correspondence:** Wael Ferjaoui, Department of General surgery, Mongi Slim University Hospital, Faculty of medicine of Tunis, Tunisia, Tel +216 52430099; Email farjaouiwael4@gmail.com

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## Clinical image

An 80-year-old woman with no past medical history was diagnosed for low rectal cancer. She underwent neoadjuvant chemoradiotherapy followed by abdominoperineal excision with definitive ileocolostomy. On post operative day 5, she started complaining of abdominal pain, nausea and vomiting. On physical examination, she appeared acutely ill and toxic, with temperature of 38.4°C, blood pressure of 90/45, pulse rate 120/min and O<sub>2</sub> saturation of 95% on room air. Her abdomen was tender and distended, with no peritoneal signs. Blood tests showed leukocytosis with a white blood cell count of  $18.45 \times 10^9/L$ , elevated blood levels for C-reactive protein of 223 mg/L, hemoglobin of 10.3 g/dl, serum lactate of 3.2 mmol/l, urea of 12.2 mmol/l and creatinine of 124  $\mu\text{mol/l}$ . Electrolytes, lipase and liver function tests were within normal limits. Chest and abdominal CT scan showed a markedly distended stomach, with air throughout the gastric wall and portal venous system (Figure 1). The diagnosis of emphysematous gastritis (EG) was established. The patient was started on intravenous broad-spectrum antibiotics, nasogastric tube decompression and total parenteral nutrition. She was transferred to intensive care unit, but died few hours later.



**Figure 1** Abdominal CT scan showing air in the gastric wall and portal venous system.

EG is a rare gastric infection caused by gas-forming organisms. It is characterized by the presence of gas within the gastric wall. Predisposing factors include immunosuppression, alcohol abuse,

diabetes, chronic consumption of NSAIDs, and pelvic surgery<sup>1</sup> as in our case. Early management by fluid resuscitation and broad-spectrum antibiotics is mandatory to reduce mortality rates, which could reach 60%. Surgery may be essential when conservative management fails to control sepsis, or in cases of gastric perforation.<sup>2,3</sup>

## Acknowledgments

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## Conflicts of interest

The authors declare no conflicts of interest.

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