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PICTURES IN DIGESTIVE PATHOLOGY

A rare cause of emphysematous infectious gastritis

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CASE REPORT

A 61-year-old man with a history of hypertension, type 2 diabetes, chronic renal failure, tuberculosis and peripheral arterial disease presented with gangrene in his right leg. A right supracondylar amputation was performed, despite which the patient continued with a high fever, oliguria and hypotension (90/50).

Laboratory work-up showed neutrophilic leukocytosis and metabolic acidosis. Computed tomography (CT) revealed pneumoperitoneum, emphysema and thickening of the gastric wall (Figs. 1 A and B). Changing the CT window we can appreciate air dissecting the layers of the gastric wall (Fig. 1C).

This clinical-radiological picture was consistent with emphysematous infectious gastritis, complicated with septic shock and the death of the patient despite treatment. The final histopathology reported gastric necrosis caused by mucormycosis affecting the entire thickness of the gastric wall and embolizing vessels.

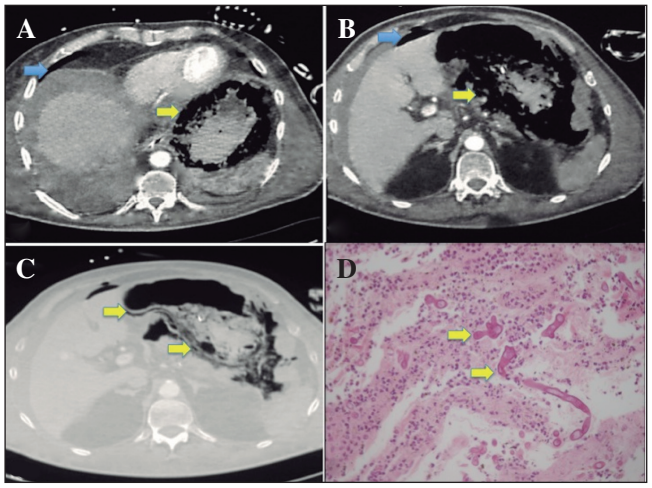

Fig. 1. A and B. Computed tomography revealing pneumoperitoneum (blue arrow), emphysema and thickening of the gastric wall (yellow arrow). C. Air dissecting the layers of the gastric wall (yellow arrows). D. Final histopathology (400x H-E). Multiple fungal filaments (yellow arrows).

DISCUSSION

The incidence of mucormycosis is 1.7/1,000,000/year. Only 7% produces gastrointestinal infections and the reported mortality is around 85% (1). Risk factors include immunocompromised states such as diabetes (2).

It is essential to make a differential diagnosis between gastric emphysema and emphysematous gastritis, with different etiology and clinical management. Gastric emphysema is usually asymptomatic with a good prognosis, whereas emphysematous gastritis associated with gas-producing microorganisms has a poor prognosis, especially if it is associated with portal gas (3). Diagnosis of gastrointestinal mucormycosis requires a high index of suspicion because there are few reported cases in the literature. Definitive diagnosis is histological.

Successful treatment depends on early diagnosis, control of risk factors, early antifungal therapy and surgical debridement of necrotic tissue if necessary (4).

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