

## Emphysematous Pancreatitis: A Rare and Serious Complication

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### Abstract

### Case Report

Emphysematous pancreatitis is a severe and rare form of acute pancreatitis that can be life threatening. The diagnosis is based on imaging. CT is the examination of choice, highlighting intraparenchymal air bubbles or bubbles in the pancreatic compartment. It also helps to guide therapeutic management and identify other complications.

**Keywords:** Pancreatitis - Emphysema - Computed tomography - Diagnosis.

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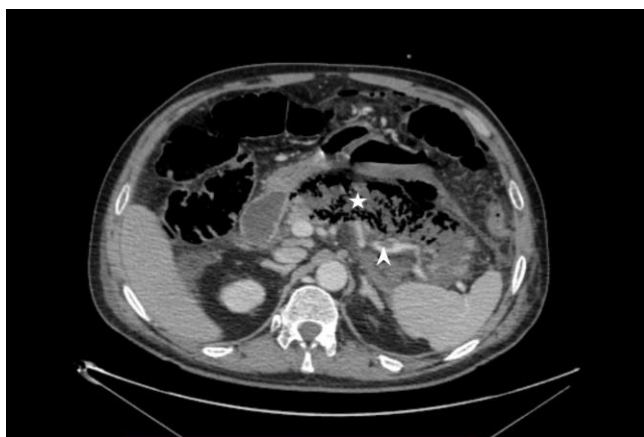
## INTRODUCTION

Emphysematous pancreatitis is a severe form of acute pancreatitis with a life-threatening prognosis. CT is the gold exam for diagnosis. Through this observation, we highlight the importance of early diagnosis and care to avoid locoregional and general complications while reviewing the literature.

## CASE PRESENTATION

We report the case of a 54-year-old patient who was diabetic with oral antidiabetics, poorly balanced, and admitted to the emergency department for diffuse

abdominal pain evolving for 04 days in the context of alteration of the general condition. Upon clinical examination, the patient was febrile 37.8°C. Capillary blood glucose was measured at 2.5 g/l without traces of acetone in the urine. Diffuse abdominal tenderness and an increase in the epigastric region without associated contracture were observed. The laboratory assessment showed a moderate inflammatory syndrome with very high lipasemia. An injected abdominal CT scan is then performed objectifying emphysematous pancreatitis at stage E with diffuse emphysema of the pancreatic compartment with necrosis flows on both sides complicated by partial thrombosis of the splenic vein (Figure 1).



**Figure 1: Injected CT axial section, objectifying severe pancreatitis (stage E) with extensive gas infiltration of the pancreatic lodge (star) complicated by necrotic casting and splenic vein thrombosis (arrowhead)**

The patient was hospitalized in the intensive care unit for 10 days. This evolution was marked by a superinfection of necrotic flows. Percutaneous drainage with CT guidance was envisaged, but the patient died of septic shock and multivisceral failure.

## DISCUSSION

Emphysematous (gangrenous) pancreatitis is a rare, severe form of acute pancreatitis, characterized by rapid, life-threatening, and destructive inflammation of the pancreas. It mainly occurs in patients with a history of diabetes, renal failure, or immunosuppression.

The diagnosis is based on imaging. The CT is the examination of choice, demonstrating intra-parenchymal or pancreatic air bubbles.

The two main causes of pancreatic gas are infection by gram negative bacteria and enteropancreatic fistulas. The most common organisms are *Escherichia coli*, *Klebsiella*, *Pseudomonas* and *Enterobacter* [1]. The prognosis for this condition is generally poor. CT scanning is used to monitor other local complications (superinfection of flows, appearance of abscesses or pseudocysts), locoregional complications (ascites, acute contiguous colitis), and vascular complications (splenic vein thrombosis and splenic artery pseudoaneurysm),

and to guide interventional radiology procedures (aspiration or percutaneous drainage). General complications include shock and multivisceral failure [1,2].

## CONCLUSION

Emphysematous pancreatitis is a severe and rare form of acute pancreatitis that can be life threatening. CT is the examination of choice for diagnosis. It also helps to guide therapeutic management and identify other complications.

**Conflict of Interest:** The authors declare no conflict of interest.

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