

Case	(076) Air in right upper quadrant: what is your choice?
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CASE PRESENTATION

An 85-year-old man went to the emergency room due to chest pain in lower hemithorax and in the right hypochondrium, with nausea. No fever. Personal history of chronic liver disease and cholelithiasis. On physical examination, it is observed conjunctival jaundice, pain in right upper quadrant and epigastrium, with positive Murphy. In the laboratory, leukocytosis (20,000 / mm³), neutrophilia, hyperbilirubinemia, hyperglycemia, increased GGT and transaminases were observed. In ultrasound there are findings of incipient cholecystitis.

Admission was decided by the Surgery service with antibiotherapy. The next day, the patient reported more pain in the right upper quadrant with increased leukocytosis (34,000/mm³). A chest x-ray is performed showing cardiomegaly.

No pulmonary infiltrates or pleural effusion are detected. In the right hypochondrium, several hydro-aerial levels are detected: one of them could be located in the gallbladder and correspond to aerobilia or emphysematous cholecystitis.

Abdominal CT is performed with intravenous contrast, which shows thickening of the gallbladder wall, air in its walls and air-fluid level inside, findings of emphysematous cholecystitis.

The cystic duct appears dilated with a lithiasis of 1.2 cm in its distal third. 6 mm lithiasis in the distal third of the common hepatic duct. Some perihepatic gas bubbles are identified in relation to small pneumoperitoneum. An emergency laparoscopic cholecystectomy was performed, which confirmed the diagnosis of emphysematous cholecystitis (EC).

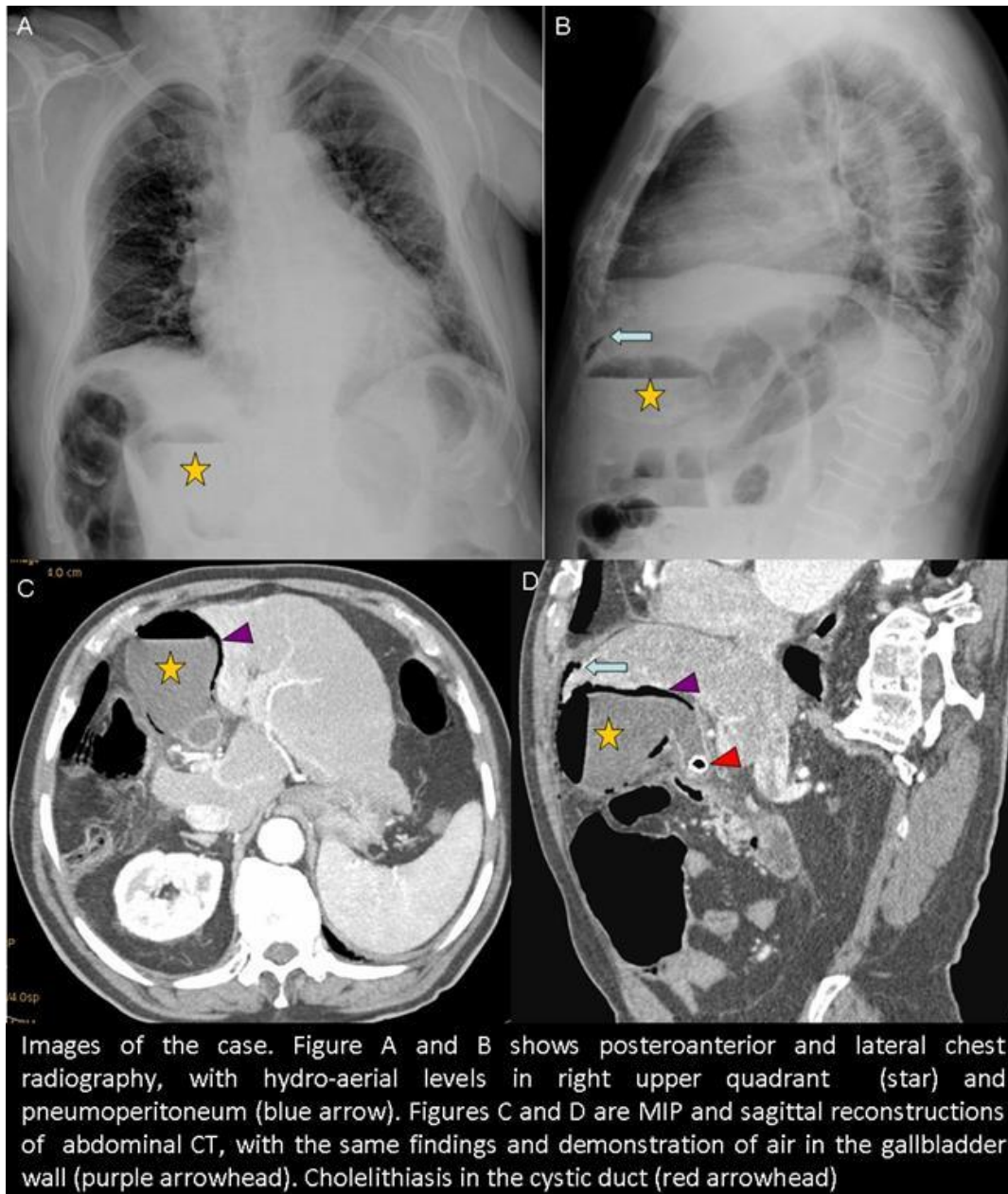
DISCUSSION

EC is an uncommon variant of acute cholecystitis, occurring in approximately 1% of cases. It is characterized by the presence of air in the gallbladder wall, as a result of the invasion of the mucosa by gas-producing organisms (*Escherichia coli*, *Klebsiella* sp, *Clostridium welchii*/perfringens,

Bacteroides fragilis). It is more common in diabetic patients and predominates in men (2:1) between 50 and 70 years old. The clinical presentation and physical findings are similar to those of cholecystitis, often insidious and may progress rapidly. In 50% of cases, it is associated with acalculous cholecystitis and higher incidence of gallbladder perforation.

CONCLUSION

The EC is a surgical emergency, due to the high mortality from gallbladder gangrene and perforation.



BIBLIOGRAPHY

Grayson DE, Abbott RM, Levy AD, Sherman PM. Emphysematous infections of the abdomen and pelvis: a pictorial review. *Radiographics*. 2002; 22: 543-561. O'Connor OJ, Maher MM. Imaging of cholecystitis. *AJR Am J Roentgenol*. 2011; 196: W367-374.