



## Perforation of the gallbladder presenting as upper respiratory tract infection

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### Keywords:

biliary, cholecystitis, gallbladder, pleural effusion, perforation

### Background:

Gallbladder perforation is a rare, but life-threatening complication of acute cholecystitis. Acute cholecystitis is a common biliary tract disease affecting mostly men over 50 years of age. Most often it occurs due to the obstruction of the bile duct by gallstones, but it can also be acalculous. 10-15% of patients with acute cholecystitis develop gallbladder perforation.

### Case presentation:

A 72-year-old male presented subfebrile with shivering to the emergency department. Upon examination by his family physician the next day rhinorrhea, hoarseness, and a slightly reduced breath sound on the right basal lung were found so viral upper respiratory tract infection was considered. However, laboratory tests showed elevated CRP (92.0 mg/L), slightly elevated AST and GGT (50 U/L and 58 U/L respectively), WBC was normal ( $10.0 \times 10^9/L$ ). The chest X-ray revealed an elevated position of the right diaphragmatic dome with smaller areas of condensed lung parenchyma supradiaphragmally and a small amount of secondary pleural effusion. Subdiaphragmally, above the liver, two air-fluid levels were observed, corresponding to the subphrenic abscess. Upon admission to the hospital, gallbladder perforation with an abscess formation was confirmed via MSCT scan, leading to subcostal laparotomy and cholecystectomy. Adhesions and an abscess collection with a diameter of 7.5 cm were identified and drained. The structures of Calot's triangle and the cystic duct were separately ligated and resected. After the surgery, the patient was placed in the intensive care unit and had an uneventful postoperative course.

On the second day post-op, drains and nasogastric tube were removed due to inactivity and oral fluid intake was initiated. The digestive system passage was established, allowing a transition to a fully oral diet. The patient was discharged on the 8th day after the surgery.

### Conclusion:

If left untreated, acute cholecystitis can lead to severe consequences, like perforation. Because of that, it's important to suspect and rule out acute cholecystitis with radiological tests, especially in atypical presentations.