



## **LAPAROSCOPIC CHOLECYSTECTOMY OF ACUTE ACALCULOUS CHOLECYSTITIS PATIENT: A RARE CASE PRESENTATION**

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### **ABSTRACT**

Acuteacalculouscholecystitis (AAC) is defined by the inflammation of the gallbladder with absence of calculi and presenting all the symptoms of the cholecystitis (upper quadrant abdominal pain , vomiting and nausea).

Acuteacalculouscholecystitis (AAC) is characterized by gallbladder inflammation without cystic duct obstruction due to gallstones. It is clinically indistinguishable from acute calculous cholecystitis (ACC)[1]Acute acalculous cholecystitis (AAC) accounts for 5-10% of cases of acute cholecystitis. The advantage of interval cholecystectomy for patients with AAC is unclear. Therefore, a retrospective analysis of patients diagnosed with AAC at our institution was performed over a 5-year period[2].

### CASE PRESENTATION

A 56-year-old woman presented to Tongji University Affiliated Shanghai East Hospital of abdominal pain complaining of right flank and epigastric pain radiating to the right upper quadrant and back. Although the patient was having regular bowel movements without gross blood. An examination of the abdomen revealed tenderness in the right upper quadrant and negative a Murphy's sign. The routine laboratory tests were unremarkable, laboratory test results were as follows: white blood cell (WBC) count;  $4.52 \times 10^9/L$ , hemoglobin (Hb); 115.0g/L, platelet count;  $167 \times 10^9/L$ , aspartate aminotransferase; 20U/L, alanine aminotransferase; 9U/L, total bilirubin; 9.5umol/L. Biological examinations revealed moderate cystolysis and cholestasis. Serology and serum tumor markers were negative: carcinoembryonic antigen (CEA) and carbohydrate antigen (CA). Abdominal Ultrasonography revealed a gallbladder wall rough (Fig1) Magnetic resonance Cholangiopancreatography (MRCP) showed long cystic duct (Fig3). DX (Radiologic diagnosis) showed Both sides were symmetrical; the trachea was centered; the mediastinum was not widened; two, the lung markings increased. Two pulmonary hilum size as usual. No tortuous widened aortic calcification. There was no obvious abnormality in heart shape and size. Both sides of the diaphragm were light and the ribs were sharp (Fig 2).

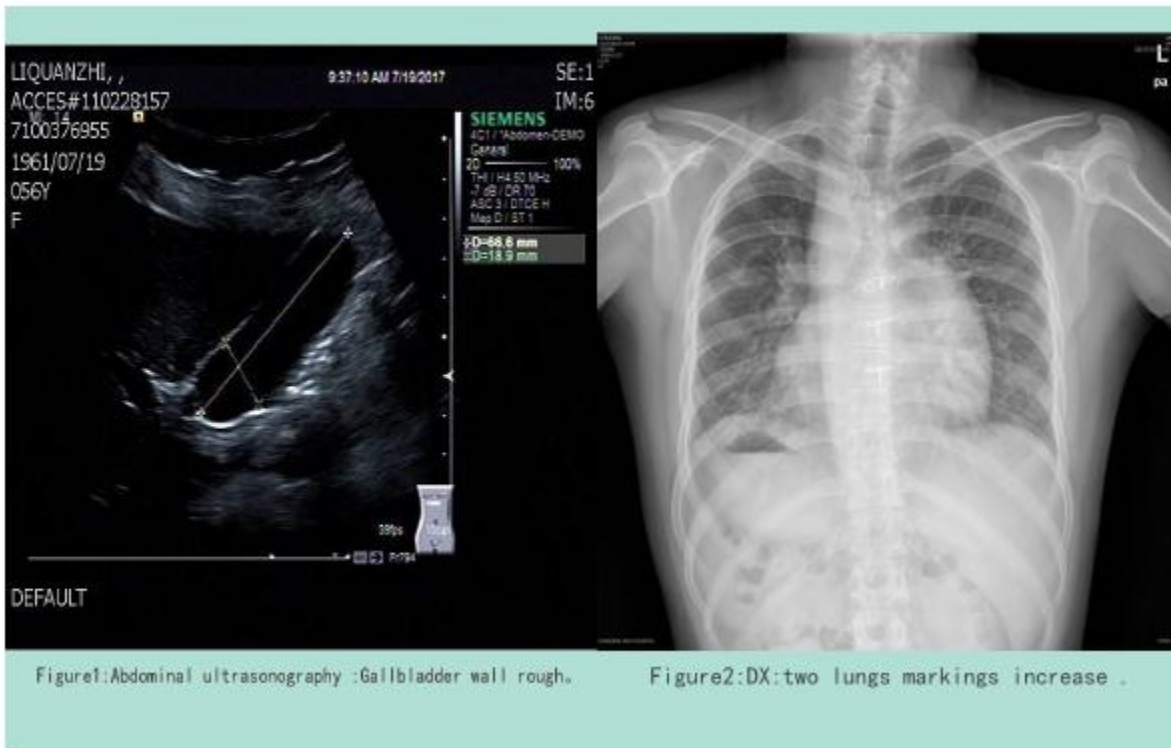


Figure1: Abdominal ultrasonography :Gallbladder wall rough.

Figure2: DX: two lungs markings increase .



Figure3::long cystic duct found by Cholangiopancreatography. (MRCP) .



Figure 4Intraoperative anatomic view of gallbladder .



Figure 5 Intraoperative anatomic viewof gallbladder cystic duct .



Figure6Laparoscopic cholecystectomy. Transection of cystic artery with Endo Shears



### Operation mode:

The patient's gallbladder was no stone ,no polyps ,and the diagnostic was AAC and underwent a laparoscopic colecystectomy without any complications.

Laparoscopic cholecystectomy process was: The skin is initially prepared with chlorhexidine from just below the nipple line to the inguinal ligaments and laterally to the anterior superior iliac spine[3]. 1CM longitudinal incision is made at the inferior aspect of the umbilicus, and 10MM trocar was inserted into the abdominal cavity to fill the abdominal cavity with CO<sub>2</sub>, and the pressure in the abdominal cavity reached 14MMHg. Insert in laparoscopic laparoscopy, guided in the right costal margin in 3MM trocar, in 5MM trocar a subxiphoid implantation. The exploration showed that the gallbladder was about 6 x 3 x 3CM, and the cystic hyperplasia of the gallbladder floor and the cystic duct were elongated. The anatomic structure of the gallbladder triangle is clear. After separating the adhesion, the cystic duct was separated from the cystic artery (Fig6)with an ultrasonic knife, and the plastic duct was clamped off the gallbladder duct at the 0.5CM of the common bile duct[4]. The gallbladder is removed from the gallbladder bed, removed and removed from the umbilicus. The operation was successful, bleeding less than 20ML, no blood transfusion. Normal saline irrigation gallbladder cavity, check the abdominal cavity without bleeding, intradermal absorption line suture incision, the patient returned to the ward safe.

The operation was successful and preoperative routine antibiotic injection was used.

### **After operation:**

On the first day after operation, the patient complained of abdominal incision pain, fever, nausea, vomiting and other complaints, has been discharged.

Physical examination: the temperature was 36 degree C, the heart rate was 80 beats /minute, 20 breaths / min, blood pressure 110/80mmhg. There was no obvious abnormality in auscultation of heart and lung. No yellow staining of sclera. Abdominal flat, soft abdomen, no obvious tenderness, no rebound pain and muscle defense. Surgical incision dry, no redness, bleeding.

### **Hospital discharge and health education:**

After discharge, outpatient follow-up, the recent low fat digestible diet, such as abdominal distension, abdominal pain and diarrhea and other timely treatment.

## **DISCUSSION**

Anatomic variations of cystic ducts are common and frequently encountered during imaging. Failure to recognize some of the clinically important variants may lead to complication during surgical, endoscopic, or percutaneous intervention procedures[5].

AAC is associated with a higher mortality rate and has a worse prognosis than ACC . Most cases of AAC occurs in critically ill patients and are related to surgery, burns, severe trauma, bacterial sepsis, shock, congestive heart failure, total parenteral nutrition, and prolonged fasting[6-7].

Acalculous cholecystitis is difficult to diagnose, but an early correct assessment is essential to successful treatment, which is readily available. In the absence of meaningful evidence-based trials, a pragmatic approach is vital. A timely diagnosis will depend on a high index of suspicion in the appropriate patient, and the combined results of clinical findings (admittedly nonspecific), plus properly interpreted imaging. This usually consists of US (often sequential) and HIDA. The approach is multifaceted. At times a diagnostic/therapeutic drainage via interventional radiology/surgery may be necessary and life-saving.

## **CONCLUSION**

Outpatient follow-up visit 1 weeks after discharge. After 1 weeks of light, easy to digest food, avoid greasy food, avoid cold. Monday morning gallstone clinic or Thursday morning, director Wang Weidong specialist clinic.

Acute acalculous cholecystitis should be suspected in every critically ill patient with sepsis in whom the source of infection cannot be found immediately. Suspicion should be especially high if the patient is injured, has undergone recent major surgery, has had a period of hypotension or hypoperfusion for any reason, or becomes jaundiced. However, acute acalculous cholecystitis can complicate critical medical illness.

Ultrasound remains the best diagnostic modality; it is inexpensive, noninvasive, and can be brought to the bedside of the unstable patient. Once the patient is diagnosed, the treatment of choice is increasingly percutaneous cholecystostomy, but if the response to drainage is not prompt and favorable, either an alternative diagnosis should be considered or an open cholecystectomy may be required. If percutaneous drainage is successful and the patient truly has no gallstones, no further treatment may be necessary and the catheter can be removed.

### **Abbreviations:**

AAC:Acuteacalculouscholecystitis

MRCP:Magnatic resonance Cholangiopancreatography

DX:Radiologic diagnosis

US :often sequential

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