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Acute cholecystitis presenting with septicemia an interesting case report

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Abstract
Acute choleycytitis and gall bladder diseases remain a commonentity in surgery. But acute cholecystitis presenting in younger age group with septicemia remain a challenging case to manage. We report a interesting case of acute choleycystitis presenting with sepsis. A 28 year old young[1] male came with complaints of abdomen pain and vomiting. Initial ultrasound showed acute choleycystitis and blood investigation showed elevated renal parameters. Patient went to sever septicemia and surgery has to be done to eliminate the sepsis.
Keywords: *Acute choleycytitis, septicemia, emergency cholecystectomy.*

Introduction

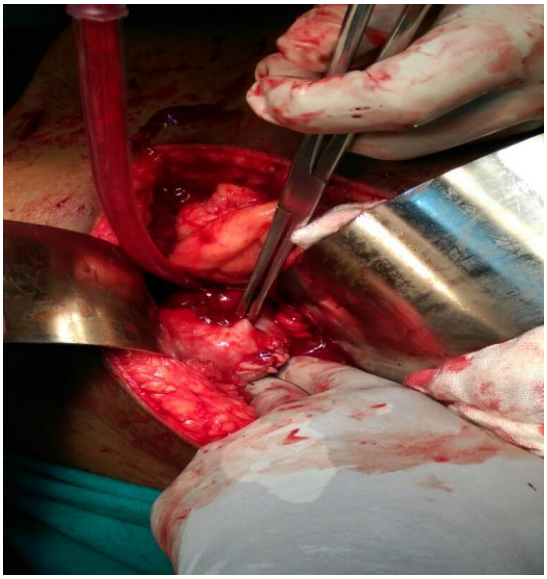
Acute inflammation of the gallbladder can occur without gallstones. Acute acalculous cholecystitis accounts for 5% to 10% of all patients with acute cholecystitis and is the diagnosis in about 1% to 2% of patients undergoing cholecystectomy. It has a more fulminate course than acute calculus cholecystitis and more commonly progresses to gangrene, empyema, or perforation. Acute acalculous cholecystitis occurs most frequently in elderly and critically ill patients after trauma, burns, long-term parenteral nutrition, and major operations such as abdominal aneurysm repair and cardiopulmonary bypass. Although the exact etiology is unclear, gallbladder stasis and ischemia have been implicated as causative factors. Stasis is common in critically ill patients not being fed enterally and may lead to colonization of the gallbladder with bacteria. Visceral ischemia is also common in patients with acute acalculous cholecystitis and may explain the high incidence of gallbladder gangrene Why inflammation develops only occasionally with cystic duct obstruction is unknown. Initially, acute cholecystitis is an inflammatory process, probably mediated by the mucosal toxin lysolecithin, a product of lecithin, as well as bile salts and platelet-activating factor. Increase in prostaglandin synthesis amplifies the inflammatory response. In acute cholecystitis, the gallbladder wall becomes grossly thickened and reddish with subserosal hemorrhages.

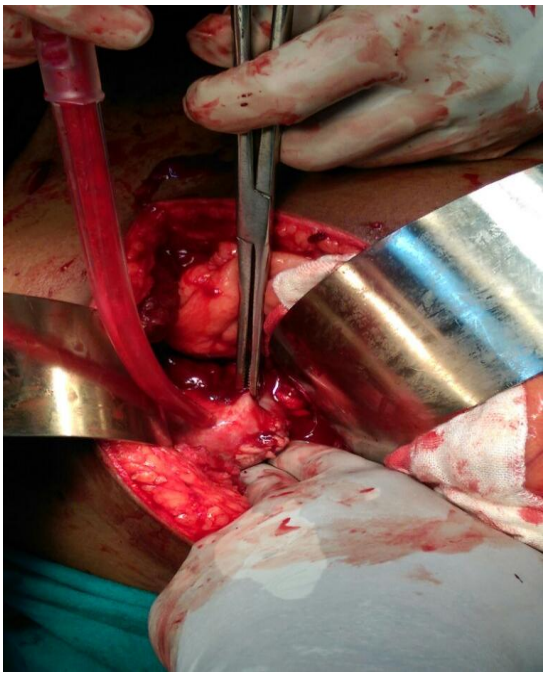
Pericholecystic fluid often is present. The mucosa may show hyperemia and patchy necrosis.

Case Presentation

An 28 year old male presented to our OPD with complaints of abdomen pain for 3 days vomiting 3 episodes no history of fever jaundice no history of similar illness in past. No history of major surgery in past. No history of reduced urine output and burning micturition. On admission patient was conscious oriented afebrile vitals were stable. CVS: S1 S2 heard, RS: BAE +, P/A: soft right hypochondrial tenderness[2] plus no guarding no rigidity no mass palpable. The initial work up[3] showed elevated renal parameter urea- 42 creatinine- 1.7. Patient was admittedand routine investigations were done. Total count was elevated 15,000, ultrasound abdomen was done showed distended gall bladder with wall thickness 5mm and pericholeycystic fluid collection. Chest xray was normal, liver function test Bilirubin raised. Patient was started on higher antibiotics and IV fluids vital were monitored periodically. On the second day patient developed high fever. Reduced urine output noted repeat urea creatinine done show elevated parameters. Nephrology opinion obtained. Blood culture and urine culture taken were normal. Third day patient day developed fever and cough and abdomen pain, saturation dropped down to 70%. Repeat ultra sound abdomen[4] showed distended gall bladder with bilateral pleural effusion. Chest x-ray was taken showed ARDS picture. Patient shifted to ICU after initial rescuitation patient was intubated electivelyand emergency cholecystectomy was planned.

Intra operative finding distended edematous gallbladder covered by omentum noted. Gall bladder was opened frank pus noted. Subtotal cholecystectomy done. Through wash given drain kept. Patient was observed in ICU. Repeat investigation was done urea and creatinine reduced. Fever subsided. Vitals were stable. Patient was started on liquid diet and slowly started on solid diet. Biopsy report of the specimen gross showed no stone and wall appear thickened and edematous. Microscopic examination showed ulceration of the mucosa with extensive area of hemorrhage, necrosis and picture was consistent of empyema gallbladder[5]. Drain fluid is bile stained following that ERCP was done showed bile leak and post choleycystectomy status. ERCP guided stenting was done. Once the drain tube is clear without any bile stain drain tube was removed on 30 th POD. Patient was discharged on 32 nd POD.





Discussion

Acalculous cholecystitis[6], i.e. inflammation of the gallbladder Without evidence of calculi or sludge, comprises 2 –15% of all cases of acute cholecystitis. The pathogenesis of acalculous cholecystitis is poorly understood. Major surgical procedures or other trauma, including burns with associated complications are the most frequent preceding conditions. Infection[7], chronic disease such as diabetes, arthritis and rheumatism, and cancer were also commonly associated[8]. Acute choleycystitis commonly present at older age group. Interestingly the age of the patient in our case was so less, and the initial presentation was itself with sepsis and renal failure[9]. His symtoms and signs were vague. On second day of admission he did t exibit any signs of ARDS but third day the renal parameters were very high and he develoed ARDS and pleural effusion. Acute choleycystitis was diagnosed on routine investigation. Patient started deteriorate[10] on initial clinical observation and medical management but responded very well with surgical management with return of normal of renal function, liver function and respiratory function.

Conclusion

Early sepsis elimination is vital part of management of sepsis and preventing the patient going to irreversible shock apart from other management. Patient responded very well with surgical treatment,[11] sepsis and renal failure reverted after a stormy postoperative period.

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