
CASE REPORT

Primary Biliary Peritonitis secondary to Gallbladder Perforation: Efficacy of Laparoscopic Treatment

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ABSTRACT

Background: Perforation of Gallbladder is a rare complication following acute cholecystitis with cholelithiasis and laparoscopic cholecystectomy is still safe.

Method: Retrospective study and review of literature performed.

Results: A 71-year-old man with spontaneous Perforation of Gallbladder with pericholecystic fluid and thickened gallbladder. He was previously well with no significant co morbidity. He was successfully managed with laparoscopic cholecystectomy.

Conclusion: Our case demonstrated the significance of early and prompt diagnosis and immediate intervention in Perforation of Gallbladder and the efficacy of laparoscopic treatment.

Keywords: Gallbladder perforation, laparoscopic cholecystectomy

INTRODUCTION

Perforated gallbladder is a life threatening complication of acute cholecystitis and cholelithiasis. Gallbladder perforation (GBP) occur in 2 to 11% of acute cholecystitis cases, high mortality rate can result from delay in diagnosis. Gallbladder perforation represents a special diagnostic and surgical challenge¹. The clinical manifestations are similar to those without perforations².

According to Niemeier (1934) classified free gallbladder perforation and generalised biliary peritonitis as acute or type I GBP, pericholecystic abscess and localised peritonitis as subacute or type II GBP, and cholecystoenteric fistula as chronic or type III³.

CASE REPORT

A 71-year-old man admitted to our hospital with a 7-hour history of sudden onset of severe generalised abdominal pain, nausea and vomiting. He has been well previously and had no significant co morbidity. On examination, he was afebrile (37.2), tachycardic (100bpm). Abdominal examination revealed generalised tenderness, worst on the epigastrium with maximum guarding and rebound tenderness. Digital rectal examination was unremarkable. Abnormal blood results included mildly raised white cell count (WBC 11.3), neutrophilia (Neutrophil 9.85), elevated C-reactive protein (CRP 38.0), raised urea and creatinine (urea 10.4, Creatinine 158), abnormal coagulation profile (PT 17, INR 1.3), urine analysis,

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liver function test, serum amylase were otherwise normal. Initial chest radiograph and plain film of abdomen were also normal. Provisional diagnosis of perforation was made patient was commenced on intravenous fluid and antibiotics (Cefuroxime and metronidazole). Urgent Ct scan showed thickened gallbladder wall with fluid present around the gallbladder and stones seen in the gallbladder. Appearance suggests acute cholecystitis, possibly with gallbladder perforation (Fig. 1). Patient latter underwent diagnostic laparoscopy with findings of acute perforated gangrenous gallbladder with bile peritonitis and pus. Gallbladder was removed with extensive washout done and drain placed on the right sub hepatic space and removed three days after surgery and discharged home three days thereafter.



Fig.1: CT scan showing gallbladder perforation, pericholecystic fluid and thickened gallbladder wall.

DISCUSSION

Following inflammation of the gallbladder with subsequent ischemia and necrosis, this will result in GBP in patients with acute cholecystitis in about 2% to 10%⁴. The main complain of patients is majorly abdominal pain accompanied with nausea and vomiting⁵, this was evident in our patients. High fever and elevated white cell count are not the diagnostic indication for gallbladder perforation⁶. Spontaneous gallbladder perforation are of three types, type I which is associated with bile peritonitis (16%) and also has the highest mortality, type II is associated with abscess or collection formation (68%) and type III is associated with fistulous connections with adjacent organs and structures (16%)⁷. Our patient had type I gallbladder perforation which accounted for the severe generalise abdominal pain and rebound tenderness. CT can show more accurate signs of free intraperitoneal air, pericholecystic fluid and abscess with co-existing gallbladder wall thickness and defect in the wall of the perforation⁸. This patient has radiological features including perforation, pericholecystic fluid and thickened gallbladder wall. He underwent emergency laparoscopic cholecystectomy with no early postoperative complications.

CONCLUSION

Early diagnosis of perforation and prompt surgical intervention is of important. Urgent abdominal CT has

an invaluable role in the diagnosis of gallbladder perforation. The reported case highlights the usefulness of CT scan and the safety and efficacy of laparoscopic cholecystectomy for gallbladder perforation.

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