

SPONTANEOUS PERFORATION OF THE GALL BLADDER: A CASE REPORT

Bhaskaran A, Vijay P Agrawal*, Vasant Kumar, M Basavarajappa

Dept. of General Surgery, Sri Devaraj Urs Medical College, Kolar, Karnataka, India

*Corresponding Author: vijugunnu@gmail.com

This article is available online at www.ss.journals.com

ABSTRACT

Gall bladder perforation is a rare but life-threatening complication of acute cholecystitis.¹ Two per cent of patients undergoing cholecystectomy are found to have perforation of the gall bladder. It occurs in 10% of patients who are being treated conservatively.² Most studies in which the patients are generally aged 60 or more. Studies reported a mortality rate of 42%, others have reported mortality to be between 12 and 16%.^{3,4,5} Due to the high mortality that can be caused by a delay in the correct diagnosis and following adequate surgical treatment, gallbladder perforation represents a special diagnostic and surgical challenge.⁶ Most cases can only be diagnosed during surgery^{7,8,9}. We report one such case which was diagnosed as gall bladder perforation.

Keywords: Gallbladder perforation, Emergency cholecystectomy

1. Case report:

A 60 year old man presented with a two day history of acute severe epigastric pain. Examination showed board-like rigidity in the upper abdomen with considerable tenderness. He had mild fever but no other signs. Total count was raised. No free gas was seen under the diaphragm on the chest X- ray but shows pleural effusion on right side. Erect X-ray abdomen was normal. (Fig 1)

Fig 1: Chest and Erect X-ray abdomen

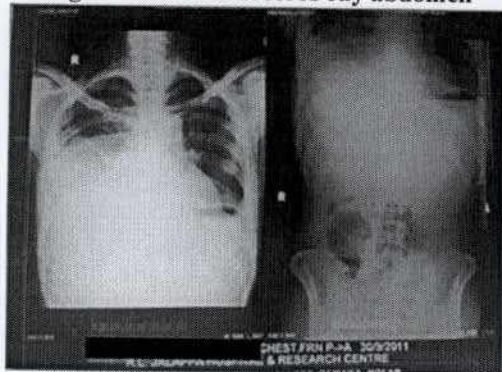


Fig 2: Free bile which was present in the peritoneal cavity

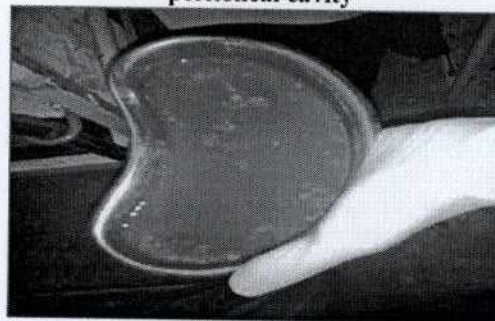
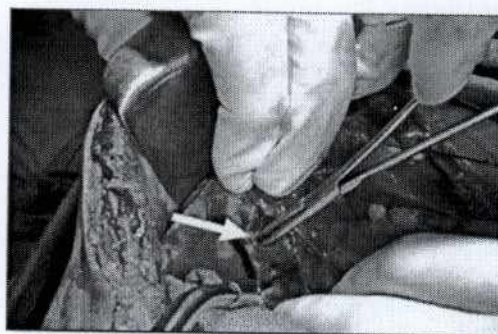


Fig 3 & 4: Site of Gallbladder perforation



Ultrasound abdomen revealed mild to moderate ascities. Aspiration of the same showed frank bile. A clinical diagnosis of biliary peritonitis was made.

The patient was brought to theatre and an upper midline incision was made. On entering the peritoneal cavity, about 1 litres of bile was drained and a gangrenous gall bladder was seen with omentum stuck to its fundus where it had perforated.(Fig 2,3 & 4)



No stones were found in the gall bladder but there was sludge typical of oriental cholangiohepatitis. A cholecystectomy was performed and right subhepatic drain was kept. Post operatively patient's condition improved rapidly. Drain was removed on 3rd post operative day and sutures were removed on 8th day.

The patient's recovery was uneventful and was discharged on the 10th postoperative day. He is on regular follow up and had no complaints till now.

2. Discussion:

Gall bladder perforation is a rare complication of cholecystitis.¹ A definitive diagnosis is uncommon before surgery and the morbidity and mortality associated with this condition are high. Glenn reported a mortality rate of 42%. Green and Roslyn and Bussutil have reported mortality to be between 12 and 16%.^{3,4,5} We had no death among our patient. This can be attributed to the fact that our patient was operated immediately. Our patient had acute presentation with no previous symptoms associated with disorders of the hepatobiliary system. Liver function tests were normal. The perforation was of type II, which is the most common type.

Treatment of choice for acute gall bladder disease is early surgery. Larimi et al¹⁰ and Addison and Finan¹¹ advocated early and urgent cholecystectomy for acute gall bladder disease. They reported the risk of perforation to be between 3 and 12% in patients treated conservatively for acute cholecystitis. They also showed that the mortality and morbidity for emergency cholecystectomies compared favourably with those for elective surgery and concluded that in well selected patients, emergency cholecystectomy for acute cholecystitis should be advocated as a safe procedure. We agree with this view.

3. Conclusion:

Gall bladder perforation is a rare but life-threatening complication of acute cholecystitis. Early diagnosis is not easy. If diagnosed early, requires emergency surgery.

References:

1. Neimeier DW. Acute free perforation of the gall bladder. *Ann Surg* 1934; 99: 922-44.
2. Harland C, Mayberry JF, Toghil PJ. Type I free perforation of the gallbladder. *JR Soc Med* 1985; 78: 725-8.
3. Glenn F, Moore SW. Gangrene and perforation of the wall of the gallbladder. *Arch Surg* 1942; 44: 677-86.
4. Lennon F, Green WER. Perforation of the gallbladder. *J R Coll Surg Edinb* 1983; 28: 169-73.
5. Roslyn JJ, Bussutil RW. Perforation of the gallbladder: a frequently mismanaged condition. *Am J Surg* 1979; 137:307-12
6. Derici H, Kara C, Bozdog AD, Nazli O, Tansug T, Akca E: Diagnosis and treatment of gallbladder perforation. *World J Gastroenterol* 2006; 12:7832-7836.
7. Roslyn JJ, Thompson JE Jr, Darvin H, DenBesten L. Risk factors for gallbladder perforation. *Am J Gastroenterol* 1987; 82: 636-640
8. Sood BP, Kalra N, Gupta S, Sidhu R, Gulati M, Khandelwal N, Suri S. Role of sonography in the diagnosis of gallbladder perforation. *J Clin Ultrasound* 2002; 30: 270-274
9. Ong CL, Wong TH, Rauff A. Acute gall bladder perforation-a dilemma in early diagnosis. *Gut* 1991; 32: 956-958
10. Larimi TKI, Kairaleuma ME, Juhani J, et al. Perforation of the gallbladder. *Acta Chir Scand* 1984; 150: 557-60.
11. Addison NV, Finan PJ. Urgent and early cholecystectomy for acute gallbladder disease. *Br J Surg* 1988; 75: 141-3.