

Chronic Empyema Gall Bladder

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Abstract: Classical empyema of gall bladder has undergone a change in clinical presentation and is now presenting as chronic calculus cholecystitis only to be confronted operatively as a chronic empyema making laproscopic cholecystectomy difficult and with an increased conversion rate to an open procedure

Keywords: Calculus cholecystitis, Classical empyema gall bladder, Chronic empyema gall bladder, Laproscopic cholecystectomy

I. Introduction

Classical Empyema gall bladder as mentioned in surgical texts seems to have undergone a shift both in clinical presentation and management and what we see is a relatively benign, chronic and indolent variety indistinguishable from routine calculous cholecystitis. This paper aims at presenting 46 cases encountered in a series of 976 cholecystectomies for benign calculous gall bladder disease in 4 years of institutional practice. Discussed is an emerging new disease entity of chronic empyema of gall bladder which has clinical picture like calculous cholecystitis and sonologically no diagnostic differentiation from calculous cholecystitis making a preoperative suspicion unlikely leading to an operative diagnosis in this era of laparoscopic cholecystectomy. Indiscriminate use of antibiotics and the easy availability of surgical facility which could play a role in the virtual disappearance of the classical acute empyema of gall bladder.

II. Materials And Methods

The series covers 976 cholecystectomies over a period of 04 years undertaken for calculus gall bladder disease diagnosed on clinical symptoms of recurrent right hypochondrium pain of duration of one month to two years in our institution confirmed by an Ultrasound of the abdomen. Excluded from the study are all forms of acute cholecystitis, choledocholithiasis and malignancy of the Gall bladder

A total of 46 cases of Empyema of gall bladder characterized by calculus obstruction containing thick frank pus diagnosed intraoperatively constitutes the basis of the study.

16 males and 30 females mean age being 47.6 years and comorbidities, 10 of them were having Diabetes Mellitus 04 were overweight and 02 cases had IHD

Clinical presentation was chronic epigastric /right subcostal pain alone in 36 patients without any tenderness 08 patients had mild tenderness associated on examination and 02 cases were asymptomatic and had an incidental detection of cholelithiasis. The basis of diagnosis was a preoperative ultrasound which showed features of chronic cholelithiasis with a normal CBD in all case but 02 where there was a suspicion of empyema of gall bladder in form of free floating debris in the gall bladder lumen however clinically there was no correlation and the hematological parameters were not contributory. All patients were taken up for a planned laparoscopic cholecystectomy after a full preoperative evaluation for any other co morbid conditions which was optimized before surgery and a preanesthetic evaluation which graded them in ASA Grade I/II. Of the 46 cases 30 cases needed a conversion to an open procedure.

III. Results And Conclusion

02 cases there was a suspicion of pus in Gall bladder sonologically there was no preoperative suspicion of an empyema of the gall bladder in the remaining 44 cases, highlighting the lack of clinical and sonological features of a chronic empyema of gall bladder. 46 cases were detected to have empyema of gall bladder operatively which is 4.7 % 30 of the 46 cases needed conversion to an open procedure in view of the dense adhesions in the hepatobiliary triangle distorting the anatomy a conversion rate of 66 %. Of the converted cases 12 of 16 were males and 18 of 30 were females. The average operating time was about 90 minutes 10 cases (08 males and 02 females) ended up with subtotal cholecystectomy due to dense adhesions and in 08 cases (50%) the gall bladder was very densely adherent to the liver bed that a portion of the posterior wall had to be left.

Of the 46 cases 30 cases needed conversion to an open procedure due to dense adhesions distorting the anatomy of the triangle of Calot and/or the Hepatocystic triangle and 16 cases which were managed

laproscopically 08 of them needed a laproscopic subtotal cholecystectomy (LSTC) and the stump was managed by endosuturing or serial stapling
Postoperative complications included bile leak in 06 cases, paralytic ileus in 02 cases and wound infection 03 cases none needing reoperation

IV. Discussion

As general surgeons gall bladder disease management is one of the most common operations we perform and cholelithiasis is the commonest condition we encounter. To recapitulate cholelithiasis presents as recurrent biliary colic, acute cholecystitis, Choledocholithiasis with or without jaundice and cholangitis, Mucocele of gall bladder and Empyema of gall bladder I would like to concentrate on Empyema gall bladder which is a complication of either acute cholecystitis or an infection of a mucocele of the gall bladder. The classical picture explained in text books of a tender right hypochondrium with or without a palpable gall bladder with leukocytosis and swinging fever and a high count with or without a mild jaundice not responding to conservative treatment often needing cholecystostomy followed later by cholecystectomy and untreated the course of the disease invariably lead to sepsis or other intraabdominal complications like abscess formation and perforation of the gall bladder with generalized peritonitis

Sonologically in a typical case of cholecystitis complicated by empyema, along with the usual ultrasound findings of cholecystitis, a distended gallbladder filled with fluid that shows multiple echoes and debris will be seen. Sometimes in cases of calculous cholecystitis, calculi fill the lumen to such a great extent that it is not possible to assess the echogenicity of the bile, the hallmark of empyema. Ultrasound alone is of limited use to diagnose pus within the gallbladder. Combined, clinical, ultrasound and laboratory criteria may help arrive at the correct final diagnosis. The incidence of acute empyema reported in literature varies 2 to 11% which include complicated acute cholecystitis and an infected mucocele. In the present study we had an incidence of 4.7%. Its association with gall bladder carcinoma and AIDS also has been reported however we did not get any association. Empyema is a disease of older age group and in our series the average age group of the whole group was 47 yrs and of the chronic empyema was 54.5 yrs. All cases the appearance of the Gall bladder was inflamed there were omental adhesions and also adhesions obscuring the Calots triangle, the gall bladder was distended and filled with pus which was sterile on culture,

Routine puncture of the gall bladder was done and pus was aspirated to get a better grip on the gallbladder.

There was no preoperative suspicion of an empyema of gallbladder as there were no symptoms or signs and there was no indication in the sonographic picture which has been described as the walls of the gallbladder appear thickened and indistinct, and exhibit scattered punctate high-amplitude echoes and there can be probe tenderness often described as positive sonographic Murphy's sign. A review of literature we did not find any report of an entity as chronic empyema except one case, but there have been lots of review and reports of presentation of empyema of gall bladder in series of acute cholecystitis without a suspicion of empyema of gall bladder. There was a clear association with male sex as reported in many reports. Conversion rates are definitely more in this condition and a low threshold is preferred for the same will definitely avoid major complications.

V. Conclusion

To conclude that chronic empyema of gall bladder is a separate entity which has a clinical presentation indistinguishable clinically and sonologically from chronic cholelithiasis and is a diagnosed operatively. There is a definite higher conversion rate due to dense adhesions distorting the anatomy

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