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Case Report

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An Unusual Presentation of Gallbladder Carcinoma-Gallbladder Perforation and Anterior Abdominal Wall Abscess

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Abstract: Gallbladder perforation (GBP) is a rare but life threatening complication of acute cholecystitis with high morbidity and mortality rates because of delay in diagnosis. Most cases can only be diagnosed during surgery. Niemeier in 1934, classified gallbladder perforation on the basis of his observation. Inspite of many modification we are still using this classification. GBP was classified as acute or type I for free perforation and generalized biliary peritonitis, sub acute or type II for pericholecystic abscess and localized peritonitis, and chronic or type III for cholecystenteric fistula. Advanced age, chronic systemic disease, immunocompromised status may contribute as predisposing factor for GBP. Here we are presenting a case report of gallbladder perforation in a patient, who was presented as anterior abdominal wall abscess. Patient was diagnosed as Adenocarcinoma of gallbladder later. It was concluded that malignancy might be a predisposing factor for GBP. Anterior abdominal wall abscess is an unusual presentation in case of GBP.

Keywords: Acute cholecystitis, Gall bladder perforation, Pericholecystic abscess, Biliary peritonitis, Immunocompromised, Adenocarcinoma.

INTRODUCTION

Gallbladder perforation (GBP) is a rare but life threatening condition. Sometimes GBP may not be different from uncomplicated acute cholecystitis with high morbidity and mortality rates. Niemeier [1] concluded that this rare condition '. . . demands eternal vigilance ... Various prognostic factors have been proposed as risk factors that contribute to the development of perforation in acute cholecystitis. Advanced age, male sex, associated chronic diseases, fever, immunocompromised condition, and marked leukocytosis should prompt an increased awareness for complication. Thus GBP still continues to be an important problem for the surgeons. Most cases can only be diagnosed during surgery. Niemeier [1] in 1934, classified gallbladder perforation on the basis of his observation. GBP was classified as acute or type I for free perforation and generalized biliary peritonitis, sub acute or type II for pericholecystic abscess and localized peritonitis, and chronic or type III for cholecystenteric fistula. High index of suspicion and diagnostic modalities such as ultrasonography and CT scan can aid in diagnosing gallbladder perforation preoperatively [2]. Early diagnosis of gallbladder perforation and immediate surgical intervention are of crucial importance to reduce the morbidity and mortality.

CASE REPORT

A 40 years housewife female presented with abdominal pain in upper abdomen from 2 months, swelling in Rt. Upper quadrant of abdomen from 15 days and off and on fever from 15 days. On examination there was a large abscess on anterior abdominal wall in Rt. Hypochondrium (Fig. 1). Lab. Investigation was showing -TLC-12500, RFT, LFT were with in normal limits. Ultrasound revealed contracted GB with thickened GB wall with multiple calculi; heterogeneous collection in abdominal wall at Rt. Hypochondriac region. CECT of abdomen (Fig. 2) revealed heterogeneous enhancing GB mass involving adjacent hepatic parenchyama, hepatic flexure of colon, overlying anterior abdominal wall musculature was showing heterogeneous collection; pneumobilia was also present on CECT. Std cholecystectomy incision was given involving the abscess, thick pus drained along with some small gall stones in abscess cavity (Fig. 3); cavity was communicating with GB fossa. Perforation found at fundus of GB; cholecystectomy done, cavity washed with povidine iodine solution and normal saline. In postoperative stitch line abscess developed that was drained rest was uneventful. Histopathology report revealed adenocarcinoma of GB then patient was referred to radiotherapy department after 15 days of uneventful stay in ward.



Fig. 1: Anterior abdominal wall abscess in rt. hypochondrium in case of all bladder perforation



Fig. 2: CECT of abdomen



Fig. 3: Gallstones extracted from abscess at ant. abdominal wall

DISCUSSION

Sometimes GBP may not be different from uncomplicated acute cholecystitis with high morbidity and mortality rates because of delay in diagnosis, most cases can only be diagnosed during surgery. Inflammation may progress and cause ischemia and necrosis resulting GBP in 2% to 11% of acute cholecystitis patients [3]. This type of presentation in form of anterior abdominal wall abscess is very rare and unusual. In 1670 the first case was recorded and Courvoisier recorded more than 100 cases in 1890 [4] in form of cholecystocutaneous fistula secondary to gallbladder perforation. However, only a couple of cases have appeared in the literature during the previous half century [5]. The rarity of this occurrence today is probably due to early diagnosis, broad spectrum antibiotics and prompt surgical intervention. Ultrasound is the initial imaging modality of choice for the evaluation of acute gallbladder disorders. However, in complication of acute cholecystitis like emphysematous cholecystitis, hemorrhagic cholecystitis, and gallbladder

perforation; ultrasound is of limited value where role of CT scan becomes more important [6]. Sanjay M *et al.* [7] reported a single case of *s*pontaneous gallbladder perforation presenting as abdominal wall abscess concluded it very rare clinical entity. Peeyush V *et al.* [8] presented a single case of gallbladder perforation presenting as abdominal and chest wall abscess concluded that abdominal wall abscess is an unusual presentation of potentially life threatening gallbladder perforation. This can begin in a subtle fashion. If it remains undiagnosed for a prolonged period of time, life threatening complication may evolve.

CONCLSION

Early diagnosis of gallbladder perforation and immediate surgical intervention are important. Standard abdominal CT has an important role in diagnosis of gallbladder perforation. But upper abdominal CT for acute cholecystitis may increase the rate of preoperative diagnosis of gallbladder perforation in which pericholecystic fluid is found by US [9].

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