

## Case Report

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# Case report and operative management of obstructed epigastric hernia containing gall bladder: a rare entity

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## ABSTRACT

An obstructed epigastric hernia containing gall bladder is a very rare entity and there are only few cases described in literature previously. A 69 year old woman presented at the emergency department at 1.00 a.m. with complains of pain and swelling in upper abdomen and having recurrent vomiting. As patient was sick and there was no imaging facility available at that time, patient was taken to OT in view of obstructed epigastric hernia. When abdomen was opened hernia sac containing gall bladder was seen. Then cholecystectomy and repair of the abdominal wall defect were performed. The patient recovered very well and was discharged on day 7.

**Keywords:** Gall bladder hernia, Hernia sac, Abdominal wall defect

## INTRODUCTION

Epigastric hernia is a frequent surgical procedure and most of the time hernial sac contains pre-peritoneal fat, omentum and bowel.<sup>1</sup> Hernial sac containing gall bladder is a rare entity.<sup>2</sup> Its symptoms may include intermittent or recurrent epigastric pain, abdominal distention, fever but their diagnosis is often an incidental finding.<sup>3</sup> This is must to be aware of the potential contents of hernia sacs, because it has implications on best operative management. This case report describes the presentation, diagnosis and operative management of our patient.

## CASE REPORT

A 69 years old female presented in emergency at 1.00 a.m. with complaint of pain and swelling in upper abdomen with recurrent episodes of vomiting. She also had a history of fever for 3-4 days. She was a known case of COPD (chronic obstructed pulmonary disease) and has no previous history of any surgery. On examination, there

was a non-reducible swelling presented in epigastric region and the abdomen was tender. Further guarding and rigidity was also present. The routine complete blood test was performed and her TLC counts were significantly raised. Due to unavailability of imaging facilities during night and the patient was unstable (tachycardia & hypotension), it was decided to take the patient for OT and initial diagnosis on the basis of clinical presentation was obstructed epigastric hernia. Initially the patient was stabilized by giving IV fluids and IV antibiotics. Ryle's tube was put and catheterization was done.

All aseptic precautions were taken and abdomen was opened by giving an upper midline skin incision, but hernial sac containing gall bladder was seen. Therefore, the incision was extended to lower midline (below umbilicus), and when abdomen was opened spillage of bile was seen over whole abdominal cavity (Figure 1).

Abdominal cavity was then washed with normal saline and all the adhesions around gall bladder were gently

removed. Gall bladder was then reduced from hernial sac. Later, Calot triangle was identified and after identifying cystic duct and cystic artery they were tied separately and gall bladder was removed from fossa vesicae biliaris. Then hemostasis was achieved and two drains were put one in subhepatic region and other one in pelvic region. Abdomen was then closed layer by layer. The recovery was satisfactory and on the seventh postoperative day the patient was discharged. There were no postoperative complications.



**Figure 1: Bile cleared from hernial sac.**

#### **Intra-operative findings**

Hernial sac was present at upper midline epigastric region (Figure 2). Perforated gall bladder which was partially gangrenous was seen within hernial sac.



**Figure 2: Hernial sac containing gall bladder.**



**Figure 3: Partially gangrenous gall bladder, removed after surgery.**

#### **DISCUSSION**

The herniation of the gallbladder in abdomen is a rare occurrence, and till date very few cases has been reported worldwide. The herniation of the gallbladder through midline in epigastric region has been much less reported. Previously, case of a gallbladder herniated through a fascial defect of a subcostal incision, through a parastomal defect and through an abdominal wall defect on the site of a previous colostomy has been described.<sup>4</sup> In this case, the herniation does not occur through an acquired defect, such as the Winslow foramen or an incisional hernia, but the gall bladder was directly herniating into the epigastric region of abdomen through the midline. To the best of our knowledge, there are only few published cases of spontaneous herniation of the gallbladder through the abdominal wall. Another interesting aspect of this case was that the presence of gallbladder in hernia sac was an incidental finding. As the patient came in emergency with complain of abdominal pain and recurrent vomiting and was unstable she had to be operated on emergency basis, we could not wait for USG or CT. Generally, the clinical features are right upper quadrant pain, associated with variable other symptoms.<sup>5</sup> In our experience the preoperative study based on computed tomography was essential for the diagnosis of the gallbladder hernia, and also to provide the information on the abdominal wall defect. But we could not get it done because patient had to be operated immediately.

#### **CONCLUSION**

The management of this type of hernia consists of removing the gall bladder and repairing the abdominal wall defect. In this case as the gall bladder was already perforated and partially gangrenous, simply reduction was not recommended. We suggest the removal of gall bladder as surgical approach. In our experience, the gallbladder herniation is a rare event and preoperative imagings are necessary to detect the gallbladder disease and the morphology of the fascial defect.

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