

A rare case of incisional hernia with herniation of liver: A case report and review of literature

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Abstract

Herniation of liver through a ventral hernia is a very rare condition. To date only four cases have been reported. Here we present a case of herniation of part of right lobe of liver through a defect due to previous colostomy in the anterior abdominal wall which has been treated successfully by anatomical repair.

Keywords: Incisional hernia, liver, anatomical repair

1.Introduction

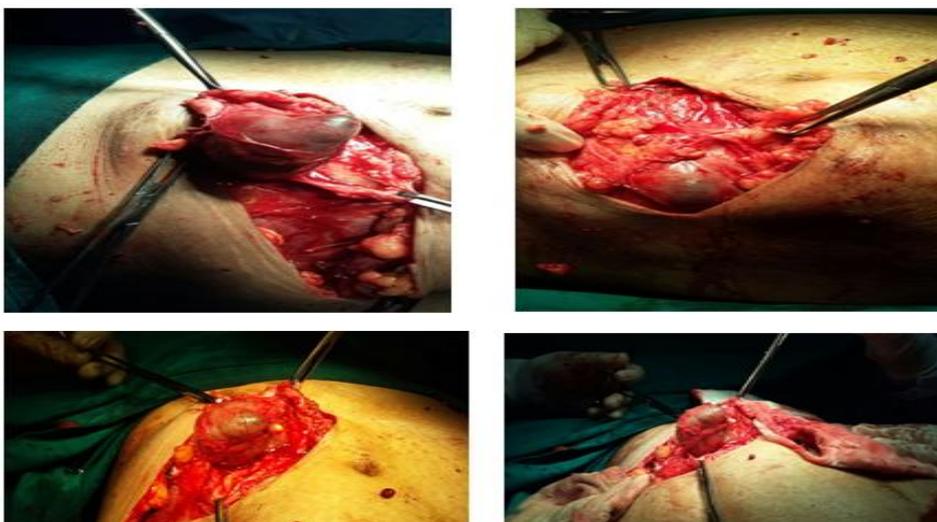
Herniation of liver through anterior abdominal wall is rare condition, usually associated with previous major upper abdominal surgeries. Because of its rarity it poses both diagnostic and therapeutic difficulty. Here we are presenting a case of herniation of liver through previous colostomy site which presented acutely and we discussed the management of this rare condition.

2. Case Presentation

A 67 year old female who was a known case of advanced carcinoma ovary had undergone diversion colostomy for large bowel obstruction; Followed by neoadjuvant chemotherapy. She responded to

chemotherapy well and cytoreductive surgery and closure of colostomy was done. Adjuvant chemotherapy was given. After two years patient came with history of severe pain abdomen and with vomiting. On examination severe right hypochondriac and right lumbar tenderness was present. A mass of size 5x4cm present in the previous colostomy site which was tender and irreducible. Exploratory laparotomy done herniation of the part of the right lobe of liver through the previous colostomy site noted. There was a cystic lesion in the herniated part of liver. Resection of the herniated part of liver was done and anatomical repair of hernia done. Post operatively no complications noted.

Figure1: Showing intraoperative findings of herniation of part of right lobe liver



3. Discussion

Herniation of liver through anterior abdominal wall hernia is a rare condition. Herniation of liver is seen in diaphragmatic hernia congenital or traumatic[1][2] only 4 cases have been reported till date with herniation of liver through ventral hernia.[3][5].

Sheer and Runyon reported the case of a 45-year-old woman who had a laparotomy for trauma 33 years earlier and an orthotopic liver transplantation two years earlier. She presented with confusion and progressive upper abdominal pain and swelling for the previous three months. A CT scan showed hepatomegaly and a fatty-infiltrated liver protruding through an incisional wall defect. She was admitted to the intensive care unit and died of Pseudomonas sepsis. Abci and colleagues reported the case of a 73-year-old woman who had a cholecystectomy through a right subcostal incision six years earlier and a laparotomy for intestinal obstruction four years earlier. The patient had a six-month evolution of right upper quadrant abdominal pain, nausea, and dyspnea. A physical examination revealed a right 3 × 3 cm zone of induration at the subcostal surgical scar but no rebound tenderness. On a CT scan, an incarcerated incisional hernia associated with the medial segment of the left hepatic lobe was identified. Owing to cardiac and pulmonary disease in the absence of peritonitis, the patient was managed non-surgically. Shanbhogue and Fasih reported the case of a 48-year-old woman with a three-week history of discomfort and swelling in the epigastrium. Two years earlier, the patient had coronary artery bypass surgery that was further complicated by post-surgical sternal dehiscence. She had a lump on the epigastrium with minimal tenderness. A CT scan showed herniation of a left hepatic lobe segment through a midline defect in the anterior abdominal wall. Since her symptoms were minor, she was not operated on.[6]

Salemis and colleagues[7] reported a case of right lumbar incisional hernia with herniation of right lobe liver. Losanoff and colleagues[8] reported the case of a recurrent intercostal herniation of the liver. Adeonigbagbe and colleagues[9] reported a case in which the herniation of a liver segment through the rectus muscle presented as persistent abdominal pain.

Usually the herniation of liver through anterior abdominal wall is non-acute[6] but in our case patient presented with acute symptoms of incarceration.

All the case reports of liver herniation shows history of previous major upper abdominal surgeries

as in our case. This article highlights the significance of possibility of liver herniation in upper abdominal surgeries and its associated morbidity and its management options.

4. Conclusions

Liver herniation through an incisional anterior abdominal wall hernia in this report represents, to the best of our knowledge, the fifth such case reported in the literature. Old age underlying malignancy, previous surgical event are likely to have contributed to the incisional hernia formation. The description of the diagnostic approach and the consideration of comorbidities in this and previous case reports are important for such rare cases.

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