INTRAHEPATIC GALLBLADDER: CASE REPORT

Sherif Monib General surgery department, West Hertfordshire Hospitals NHS Trust, UK.

Piyush Mahapatra General surgery department, West Hertfordshire Hospitals NHS Trust, UK.

Hany Fayez. General surgery department, Habashy Hospital, Cairo, Egypt.

ABSTRACT

Intrahepatic gallbladder is one of the numerous ectopic locations of the gallbladder, where the gallbladder lies within the liver parenchyma or has a subcapsular location along the anterior inferior right lobe of the liver. An intrahepatic gallbladder is known to have impaired function leading to formation of gall bladder stones.

We are presenting a case of a 57 years old male who was found to have an intrahepatic gall bladder which was not detected preoperatively a retrograde open cholecystectomy was carried out without intraoperative or postoperative complications.

Awareness of the presence of ectopic gallbladder sites and their recognition allows proper intra-operative planning.

KEYWORD

Gall bladder, Intrahepatic gallbladder, Cholecystectomy.

ARTICLE HISTORY

Submitted: 05-04-2018 **Accepted: 28-07-2018** **Published: 10-09-2018**

*Corresponding Author Sherif Monib

General surgery department, West Hertfordshire Hospitals NHS Trust, UK.

sherifmonib@gmail.com

INTRODUCTION

Congenital anomalies involving the gallbladder are very rare. An intrahepatic gallbladder usually has impaired function because it does not empty completely. This may result in a large number of these patients going on to develop gallstones as a result of bile stasis. Therefore a large number will require surgery, which can be problematic due to the unusual anatomy.

CASE REPORT

We present the case of a 57 years old male seen in the outpatient clinic who presented with a six month history of intermittent attacks of colicky abdominal pain mainly in the right hypochondrium, radiating to the right shoulder.

There was no significant past medical history. The only family history of note was that his mother was diagnosed with breast cancer at the age of 68.

General examination was unremarkable , observations were all stable. Abdominal examination revealed no palpable masses or organomegaly. There was mild tenderness in the right upper quadrant and epigastric region with no rebound tenderness and Murphy's sign was negative.

Initial laboratory investigations including full blood count, liver function tests, serum amylase as well as kidney functions were all normal.

Based on the history and clinical findings, a provisional diagnosis of gallbladder stones was suspected so abdominal ultrasound scan was performed. The results confirmed the clinical diagnosis, showing chronic calculous cholycystitis with a normal calibre common bile duct.

The patient booked and consented for elective laparoscopic cholecystectomy which revealed an intrahepatic gallbladder so the operation was converted to conventional open surgery through a Kocker incision. The gall bladder was found to be intrahepatic with its fundus appearing on the anterior surface of the liver. [Fig 1]

Retrograde cholecystectomy was carried out after resecting through the liver substance to separate the gall bladder from its bed [Fig 2]. The cystic duct was of considerable length (about 8 cm) resected flush to the common bile duct as a small stone was impacted at its proximal end .[Fig 3]

After haemostasis, a size 16 tube drain was left in the operative bed, mass abdominal wall closure was carried out.

On the second post operative day the patient was able to tolerate fluids and a light diet, his postoperative bloods were within normal range. The drain only drained 40 mls of serous fluid, so it was removed. He mobilized well and was discharged home after three days.

One month later the patient was seen in the outpatient department. He had continued to recover well without any recorded complications

DISCUSSION

Ectopic gallbladders are a very rare finding[4]. Multiple locations have been identified including left lobe intrahepatic, tansverse, retroplaced or "floating" gallbladders. There have also been some rarer case reports of the gallbladder in the falciform ligament and in the anterior abdominal wall. The intrahepatic location is the 2nd most common location for ectopic gallbladders[7].

Despite its rarity awareness of the possibility of an ectopic gallbladder is important pre-operatively. Ectopic

gallbladders can have significant complications, including an increased incidence of co-existent cholelithiasis[6] due to biliary stasis, risk of torsion if it is suspended on a mesentery or even herniation through the foramen of Winslow.

A significant number of these cases will therefore progress onto surgery.

This can lead to increased difficulties intraoperatively, particularly if there not an awareness of the possibility of an ectopic gallbladder. Although there have been case reports suggesting the importance of identifying ectopic gallbladders pre-operatively[7], this unfortunately did not occur in our case, probably as a result of the intrahepatic location of the gallbladder. However, our example demonstrates, even if it is identified intraoperatively, open surgery using a retrograde approach, can be performed with very successful results. Although laparascopic cholecystectomy for ectopic gallbladders appears to be becoming increasingly common[9], there are still no documented cases of its use in removing intrahepatic gallbladders and so open surgery should remain the treatment of choice.

Figures

1- Figure1: Intraoperative photo showing intrahepatic gallbladder with its fundus appearing on the anterior surface of the liver.
2- Figure2: Intraoperative photo showing separateion of the gall bladder from the liver substance .
3- Figure3: Post operative specimen showing long cystic duct with a small stone impacted at its proximal end

CONCLUSION

Although a rare condition, an intrahepatic gallbladder will often require surgery due to the increased incidence of cholelithiasis due to biliary stasis. Awareness of the presence of ectopic gallbladder sites and their recognition allows proper intra-operative planning to avoid possible complications.

CONSENT

Written consent was obtained for publication of this case report and accompanying images.

REFERENCES

1. Faure JP, Doucet C, Scepi M, Rigoard P, Carretier M, Richer JP. Abnormalities of the gallbladder, clinical effects. Surg Radiol Anat. 2008 Jun;30(4):285-90
2. Dhulkotia A, Kumar S, Kabra V, Shukla HS. Aberrant gallbladder situated beneath the left lobe of liver. HPB (Oxford).2002;4(1):39-42.
3. Colovic R, Colovic N, Barisic G, Atkinson HD, Krivokapic Z. Left-sided gallbladder associated with congenital liver cyst., 2006;8(2):157-8.
4. Lobo SW, Menezes RG, Mamata S, Baral P, Kanchan T, Hunnargi SA, Bodhe AV, Bhat NB.Ectopic partial intrahepatic gall bladder with cholelithiasis--a rare anomaly. Nepal Med Coll J. 2007 Dec;9(4):286-8.
5. Alkatout I, Henopp T, Moritz JD, Nikischin W, Klöppel G, Engler S. Extraabdominal malposition of the gallbladder. J Pediatr Surg. 2008 Nov;43(11):e41-4.
6. Boufettal R, Khaiz D, Jai SR, Chehab F, Bouzidi A. Right liver agenesis with ectopic gallbladder and bile duct calculi]. [Article in French] Gastroenterol Clin Biol. 2008 Apr;32(4):405-7. Epub 2008 Apr 10.
7. Schulz RC, Shields JB, Fletcher JW, Donati RM. Liver scanning and the intrahepatic gallbladder: Case report. J Nucl Med. 1975 Nov;16(11):1029-30.
8. Blanton DE, Bream CA, Mandel SR. Gallbladder ectopia. A review of anomalies of position. Am J Roentgenol Radium Ther Nucl Med. 1974 Jun;121(2):396-400.
9. Chung CC, Leung KL, Lau WY, Li AK. Ectopic gallbladder revisited, laparoscopically: a case report. Can J Surg. 1997 Dec;40(6):464-6.