



Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.casereports.com

Methods of safe laparoscopic cholecystectomy for left-sided (sinistroposition) gallbladder: A report of two cases and a review of safe techniques[☆]



Constantinos Nastos^{a,*}, Antonios Vezakis^a, Ioannis Papaconstantinou^b,
Theodosios Theodosopoulos^a, Vassilios Koutoulidis^a, George Polymeneas^b

^a Second Department of Surgery, School of Medicine, University of Athens, Aretaieon University Hospital, 76 Vassilisis Sofia's Ave, 11528 Athens, Greece

^b First Department of Radiology, School of Medicine, University of Athens, Aretaieon University Hospital, Athens, Greece

ARTICLE INFO

Article history:

Received 6 July 2014

Received in revised form 15 August 2014

Accepted 19 August 2014

Available online 16 September 2014

Keywords:

Laparoscopic

Cholecystectomy

Left-sided gallbladder

Safe

Technique

Systematic review

ABSTRACT

INTRODUCTION: Left-sided gallbladder is a rare anatomical variation. Usually it is discovered intra-operatively and is accompanied by anatomic variations that can prove quite challenging during laparoscopy.

PRESENTATION OF CASE: From a total of almost 3000 laparoscopic cholecystectomies performed in our institution, two cases of left sided gallbladder were unexpectedly identified intraoperatively. There were no indications for the ectopy preoperatively. In both cases modifications of the standard laparoscopic technique were mandatory. They were performed safely with no post-operative complications. Modifications consisted of transposition of the subxiphoid entry port and alteration in the direction of traction of the rest of the graspers. A review of the literature for methods of safe laparoscopic cholecystectomy was conducted.

DISCUSSION: The surgeon must be aware of the anatomic variances in the rare occasion of a left sided gallbladder, since preoperative diagnosis is very difficult.

CONCLUSION: Knowledge of potential hazards and modifications of laparoscopic technique is mandatory in order to avoid complications.

© 2014 The Authors. Published by Elsevier Ltd. on behalf of Surgical Associates Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

1. Background

A left-sided gallbladder can either occur as part of situs inversus, or as a true gallbladder malposition. A true malposition of the gallbladder is very rare. Malposition can be either medioposition, or sinistroposition (true left-sided gallbladder). In medioposition, the gallbladder is displaced medially to lie on the undersurface of segment IV but is still on the right side of the round ligament. In sinistroposition, the gallbladder lies under segment III, to the left of the round ligament.¹

Although major issues arise from this anomaly during liver surgery and transplantation, it can cause significant problems, which can lead to complications and morbidity during laparoscopic cholecystectomy, as well, as biliary tract and arterial anomalies are

described in these situations.² It is therefore quite important for the surgeon to be able to recognize this anomaly early, in order to be able to set the laparoscopic ports accordingly and anticipate possible biliary and vascular anatomic variations and prevent complications. We present two cases of patients that were found intra-operatively to have left sided gallbladders during laparoscopic cholecystectomy. After performing a brief review of the literature we propose strategies for intra-operative diagnosis and safe management of this rare entity.

2. Technique presentation

From a total of almost 3000 laparoscopic cholecystectomies performed in our institution during the period 1990–2012, we unexpectedly identified two cases where the gallbladder was situated to the left of the ligamentum teres. Both patients were preoperatively submitted to abdominal ultrasound which revealed gallbladder stones, but no evidence of ectopy, even after post-operative cross-examination of the images (Fig. 1).

After the placement of the trocars the gallbladder was not identified in its usual position, while careful inspection located the gallbladder to the left of the ligamentum teres (Fig. 2a).

[☆] This article is published Open Access at sciencedirect.com. It is distributed under the IJSCR Supplemental terms and conditions, which permits unrestricted non commercial use, distribution, and reproduction in any medium, provided the original authors and source are credited.

* Corresponding author. Tel.: +30 2107286000.

E-mail address: kosnastos@yahoo.gr (C. Nastos).

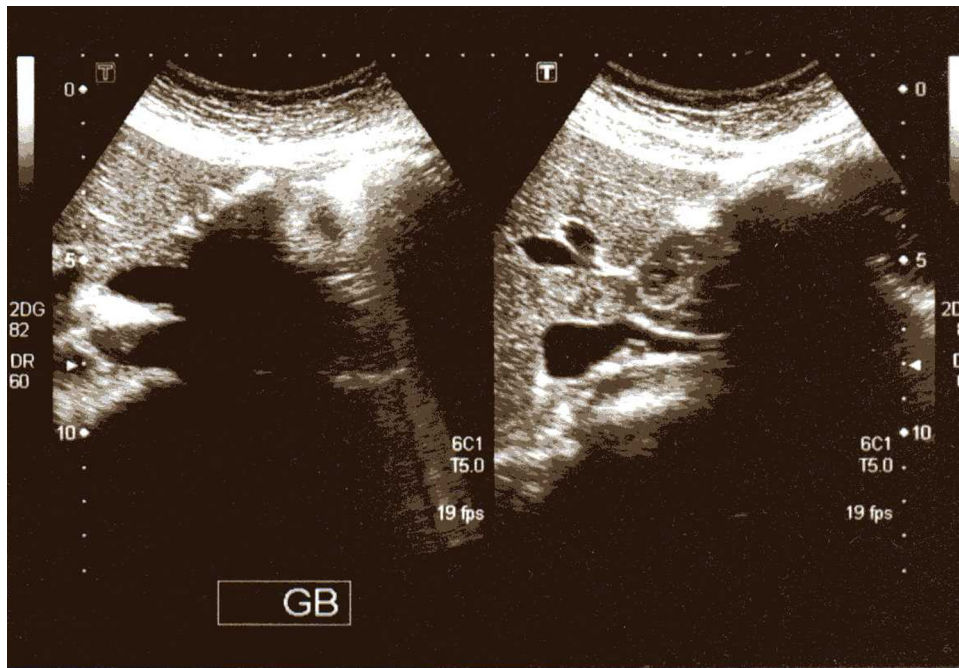


Fig. 1. Case 1: Abdominal ultrasound of the abdomen. Multiple gallbladder stones with extensive acoustic shadowing. Left-sided gallbladder could not be identified.

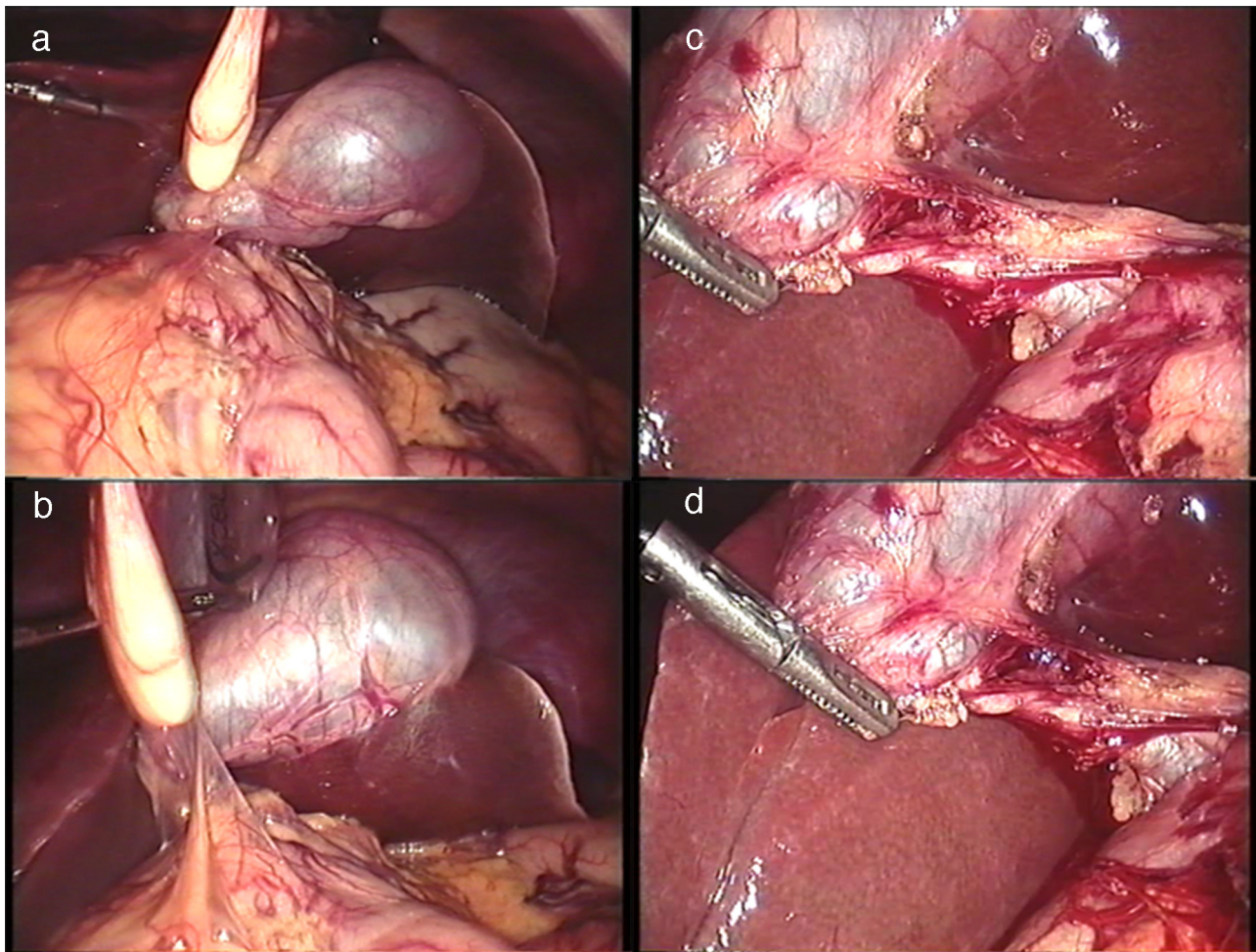


Fig. 2. (a) Case 1: Localization and identification of the gallbladder to the left of the ligamentum teres, under the left hemiliver. (b) Case 1: The subxiphoid port is relocated to the left of the round ligament. The anterior axillary trocar is used to push the fundus of the gallbladder cephalad revealing Calot's triangle. (c) Case 1: Calot's triangle is dissected using the subxiphoid trocar, and the midclavicular trocar is used in order to manipulate Hartmann's pouch. (d) Calot's triangle was dissected revealing a cystic duct entering the common bile duct from the right (white arrow).

Download English Version:

<https://daneshyari.com/en/article/4289247>

Download Persian Version:

<https://daneshyari.com/article/4289247>

[Daneshyari.com](https://daneshyari.com)