Minimally Invasive Surgical Approach for Radicalization of Incidental Post Cholecystectomy Gallbladder Neoplasm: Safety, Feasibility and Short Term Outcome


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INTRODUCTION

- Gallbladder carcinoma is a rare but aggressive malignant neoplasm

- Incidental gallbladder carcinoma (IGBC) following laparoscopic cholecystectomy: 0,2-2,8%
INTRODUCTION

**ORIGINAL ARTICLE**

**Gallbladder Cancer: expert consensus statement**

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(T1b–2) disease should include en bloc resection of adjacent liver parenchyma. Patients with T1b, T2 or T3 disease that is incidentally identified in a cholecystectomy specimen should undergo re-resection unless this is contraindicated by advanced disease or poor performance status. Re-resection should include complete portal lymphadenectomy and bile duct resection only when needed to achieve a negative margin (R0) resection. Patients with preoperatively staged T3 or T4 N1 disease should be considered

- majority of patients have residual disease either in the liver or the lymph nodes
- Radicalization is required to achieve R0 resection
INTRODUCTION

By Which APPROACH?
Open SURGERY

Up to date is the gold standard approach
Is there a role for Minimally Invasive Surgery...???
Totally Laparoscopic Hepatic Bisegmentectomy (s4b+s5) and Hilar Lymphadenectomy for Incidental Gallbladder Cancer

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Conclusions. Laparoscopic resection of liver segments 5 and 4b combined with a locoregional lymphadenectomy of the hepatoduodenal ligament is an oncologically appropriate technique, provided it is performed in a specialized center with experience in hepatobiliary surgery and advanced laparoscopic surgery. This video may help oncological surgeons to perform this complex procedure.
Minimally invasive versus the conventional open surgical approach of a radical cholecystectomy for gallbladder cancer: a retrospective comparative study

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Abstract

Background: Laparoscopic surgery has traditionally been contraindicated for the management of gall bladder cancer (GBC). This study was undertaken to determine the safety and feasibility of a laparoscopic radical cholecystectomy (LRC) for GBC and compare it with an open radical cholecystectomy (ORC).

Methods: Retrospective analysis of primary GBC patients (with limited liver infiltration) and incidental GBC (iGBC) patients (detected after a laparoscopic cholecystectomy) who underwent LRC between June 2011 and October 2013. Patients who fulfilled the study criteria and underwent ORC during the same period formed the control group.

Results: During the study period, 147 patients with GBC underwent a radical cholecystectomy. Of these, 24 patients (primary GBC—2, iGBC—4) who underwent a LRC formed the study group (Group A). Of the remaining 123 patients who underwent ORC, 46 matched patients formed the control group (Group B). The median operating time was higher in Group A (270 versus 240 mins, \( P = 0.021 \)) and the median blood loss (ml) was lower (200 versus 275 ml, \( P = 0.034 \)). The post-operative morbidity and mortality were similar \( (P = 1.0) \). The pathological stage of the tumour in Group A was T₁, T₂ (n = 11) and T₃ (n = 8), respectively. The median lymph node yield was 10 (4-31) and was comparable between the two groups \( (P = 0.642) \). During a median follow-up of 18 (6-34) months, 1 patient in Group A and 3 in Group B developed recurrence. No patient developed a recurrence at a port site.

Conclusion: LRC is safe and feasible in selected patients with GBC and the results were comparable to ORC in this retrospective comparison.

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EVIDENCE: Minimally Invasive Surgical Approach (MIS) has not been fully investigated yet

Aims of our study:

• Is MIS “surgically” a safe and feasible technique for radicalization of IGBC?

• Is MIS “oncologically” appropriate for radicalization of IGBC?
Materials & Methods

- Period: 2012-2017
- Selected small cohort of patients (n.6)
- Gallbladder Carcinoma pT1b (stage I)
- Incidental post Laparoscopic Cholecystectomy
- Gender: 3 males, 3 females
- Technique: 3 laparoscopic, 3 robotic
• Redo procedure: liver resection (segments IVb + V) and lymph nodes clearance of hepatoduodenal hilum and common hepatic artery

• Technique: 3 laparoscopic, 3 Robotic
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Peri-operative Data

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<th>Case n.</th>
<th>Preop TNM</th>
<th>Time to redo surgery (days)</th>
<th>Procedure</th>
<th>Op. Time (min)</th>
<th>Blood loss (ml)</th>
<th>Pringle</th>
<th>Conversion</th>
<th>Complication</th>
<th>Hospital stay (days)</th>
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<td>30</td>
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Median Operative Time: 290 min.
Median Blood Loss: 175 ml
SURGICAL OUTCOMES

• Peri-operative mortality: 0%

• Morbidity:
  - hemoperitoneum (1): required second-look

• Total median hospital stay was 6 (5-10) days
ONCOLOGICAL OUTCOMES

• R0 resection: 100%

• Lymph Nodes: 17.5 (14-22)

• 1 case of pN1 status (post redo stage IIIb)

• Median Follow-Up 44 months (30-56)

• Recurrence: 0%
CONCLUSIONS

Our data suggest that Radicalization of Gallbladder Carcinoma pT1b (stage I) by MIS is:

• Safe

• Feasible

• Oncologically appropriate
Large multicenter studies are needed to validate these results
Thanks for your attention!!!