Laparoscopic cholecystectomy with resection of the gallbladder mesentery for suspected gallbladder cancer

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Background

Owing to the lack of specific clinical manifestations in the early stage, gallbladder cancer (GBC) is difficult to diagnose and has a high misdiagnosis rate. Furthermore, treatment strategies according to the cancer stage are controversial. Herein, we report laparoscopic cholecystectomy (LC) with resection of the gallbladder mesentery (GBM) for suspected GBC.

Summary

Our strategy for suspected GBC

Suspected GBC

CT/EUS/ERCP

- Suspected GBC
- GBC stage Ⅰ

- GBC stage Ⅱ or Ⅲ

ExC or more

LC with resection of the GBM

＜Intraoperative findings＞ Positive margin of cystic duct → CBD resection

＜Postoperative findings＞ Stage Ⅱ → ExC (Follow-up is an option depending on age/general condition)

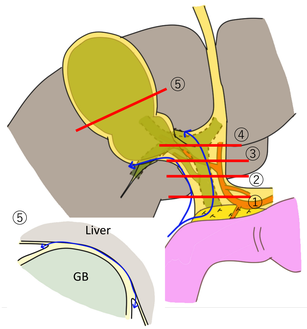
Stage Ⅲ → ExC or more

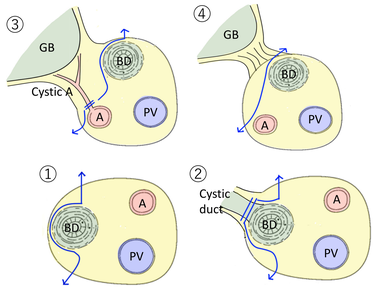
Conclusions

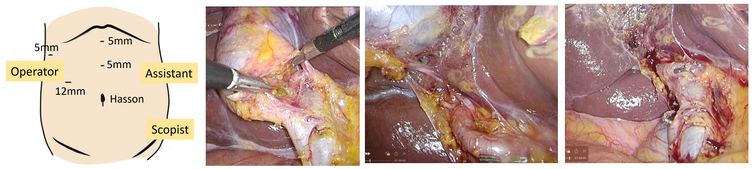
LC with resection of the GBM was safe and had a favorable prognosis. Further studies may reveal the appropriate indications of LC with resection of the GBM according to the cancer stage.

Methods

- GBM: Tissue around the gallbladder and cystic duct extending from the cystic artery
- LC with resection of the GBM (LC-GMB): After lymph node dissection around the bile duct, the root of the cystic duct was divided. The gallbladder was dissected from the liver exposing Laennec's capsule.







- LC-GBM was performed on 25 patients with suspected GBC, excluding hepatic or serosal invasion.
- We reviewed the outcomes of LC-GBM and compared them with those of extended cholecystectomy (ExC) for T1 and T2 lesions in GBC cases.

Results

< LC-GBM >

		N=25
Diagnosis	Adenocarcinoma	8
	Intracholecystic papillary neoplasm	3
	Metastatic sarcoma	1
	Adenoma	1
	Hyperplastic poplyp	1
	Other benign tumors	11
Operative findings	Operation time (min)	135 ± 35
	Blood loss (g)	2.5 ± 7.2
Postoperative findings	Complication	0
	Postoperative hospital day (day)	6.0 ± 2.4

Tumor size : 18 ± 5 mm
T factor : T1a 1, T1b 2, T2 5
N factor: N0 8, N1 0
vessel invasion : ly0 5, ly1 3
v0 5, v1 3

<LC−GBM vs ExC>

Variables		LC (n=8)	ExC (n=17)	P value
Patient characteristics	Age (year)	77 ± 7	75 ± 11	0.635
	Sex	6/2	11/6	0.602
Operative facrtors	Operation time (min)	131 ± 28	257 ± 36	0.000
	Blood loss (g)	0	264 ± 164	0.000
Postoperative course	Complication (CD ≥ 2)	0	4 (24%)	0.064
	Postoperative hospital stay (day)	7 ± 3	21 ± 18	0.069
Pathological findings	T, (1a/1b/2)	1/2/5	2/0/15	0.081
	N, (-/+)	8/0	13/4	0.064
	Vessel invasion, (0/1)	5/3	7/10	0.318

<LC−GBM vs ExC (prognosis)>

