

Conduta no câncer incidental da vesícula biliar



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Colégio Brasileiro de Cirurgiões

A CASA DO
CIRURGIÃO BRASILEIRO



Orlando Jorge M. Torres

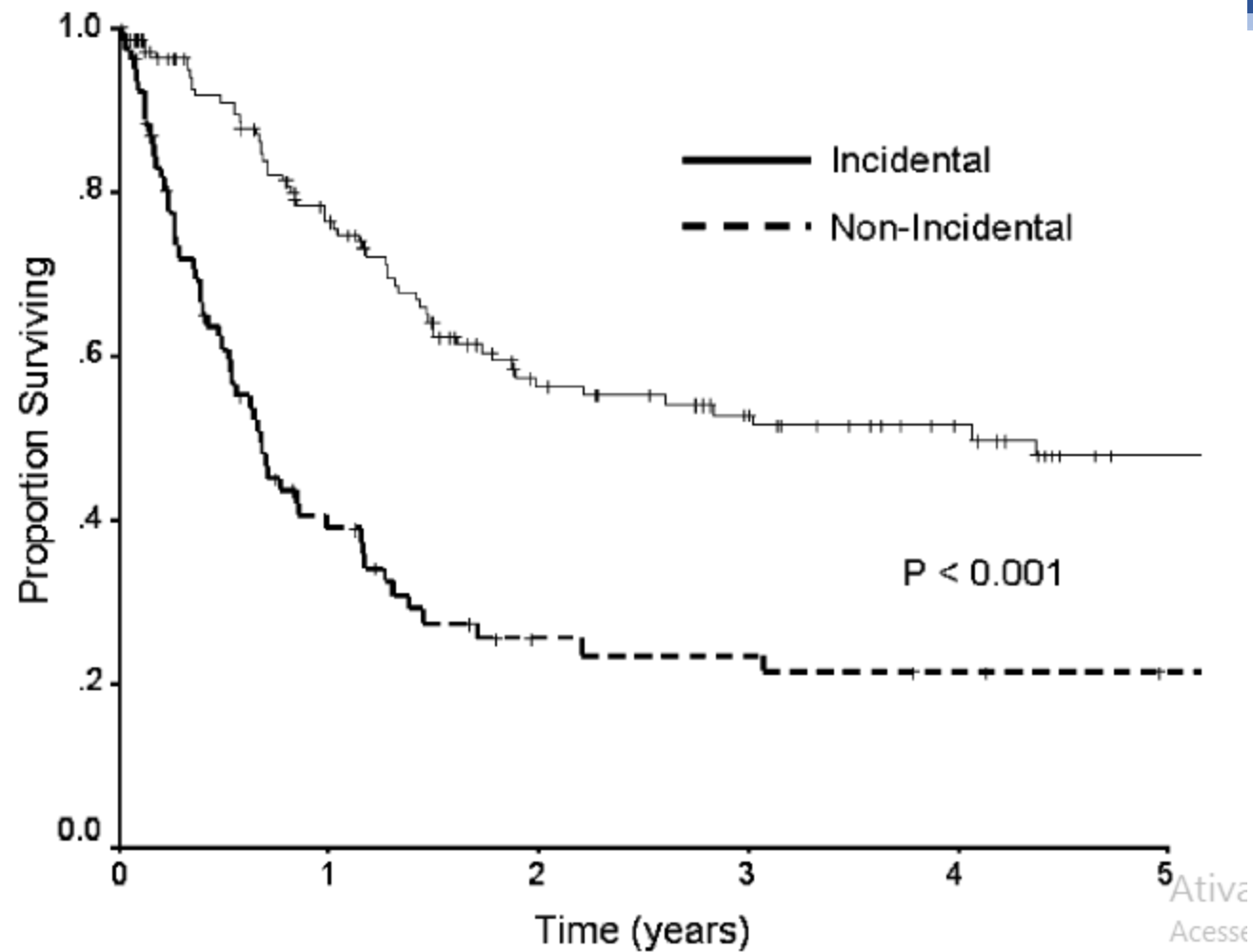
Professor Titular e Chefe do Serviço de Cirurgia do
Aparelho Digestivo

Unidade Hepatopancreatobiliar
Universidade Federal Maranhão - Brasil

INCIDENTAL GALLBLADDER CANCER

- ☐ Suspected preoperatively
- ☐ Unexpected finding during laparoscopic cholecystectomy
- ☐ Discovered incidentally (IGBC) by the pathologist

GALLBLADDER CANCER





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ABCD Arq Bras Cir Dig

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Original Article

BRAZILIAN CONSENSUS ON INCIDENTAL GALLBLADDER CARCINOMA

Consenso brasileiro de carcinoma incidental de vesícula biliar

On behalf of the "International Study Group of Hepatopancreatobiliary Cancer- ISG-HPB-Cancer",

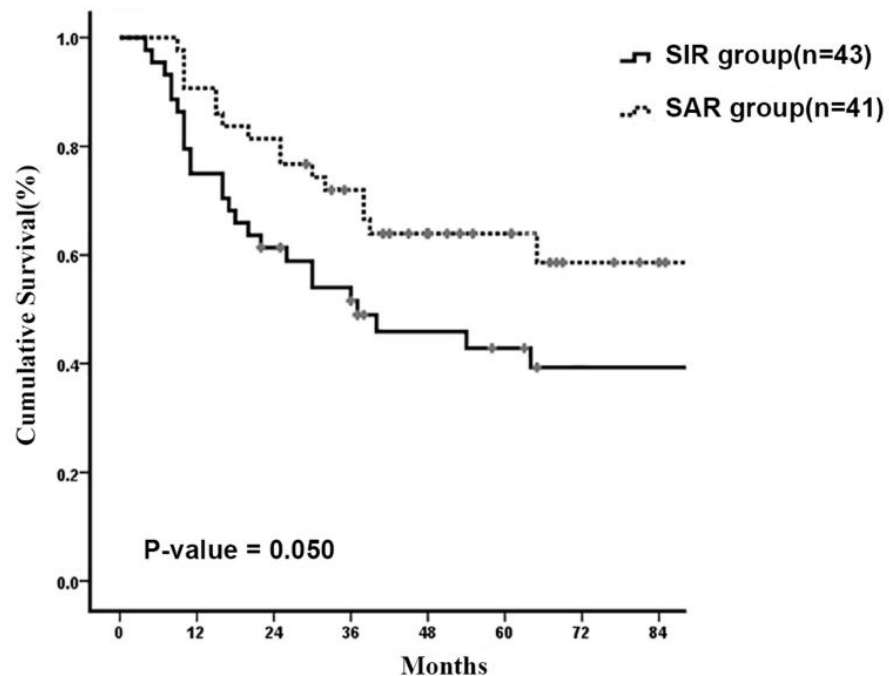
Felipe Jose F **COIMBRA**¹, Orlando Jorge M **TORRES**², Ruslan **ALIKHANOV**³, Anil **AGARWAL**⁴, Patrick **PESSAUX**⁵, Eduardo de Souza M **FERNANDES**⁶, Claudemiro **QUIREZE-JUNIOR**⁷, Raphael Leonardo C **ARAUJO**⁸, André Luis **GODOY**⁹, Fabio Luis **WAECHTER**⁹, Alexandre Prado de **RESENDE**¹⁰, Marcio Fernando **BOFF**¹¹, Gustavo Rego **COELHO**¹², Marcelo Bruno de **REZENDE**¹³, Marcelo Moura **LINHARES**⁸, Marcos **BELOTTO**¹⁴, Jose Maria A **MORAES-JUNIOR**², Paulo Cezar G **AMARAL**¹⁵, Rinaldo Danesi **PINTO**¹⁶, Tercio **GENZINI**¹⁷, Agnaldo Soares **LIMA**¹⁸, Heber Salvador C **RIBEIRO**¹, Eduardo José **RAMOS**¹⁹, Marciano **ANGHINONI**²⁰, Lucio Lucas **PEREIRA**²¹, Marcelo **ENNE**²², Adriano **SAMPAIO**²³, André Luis **MONTAGNINI**²⁴, Alessandro **DINIZ**¹, Victor Hugo Fonseca de **JESUS**²⁵, Bhawna **SIROHI**²⁶, Shailesh V **SHRIKHANDE**²⁶, Renata D'Alpino **PEIXOTO**²⁷, Antonio Nocchi **KALIL**²⁸, Nicolas **JARUFE**²⁹, Martin **SMITH**³⁰, Paulo **HERMAN**²⁴.



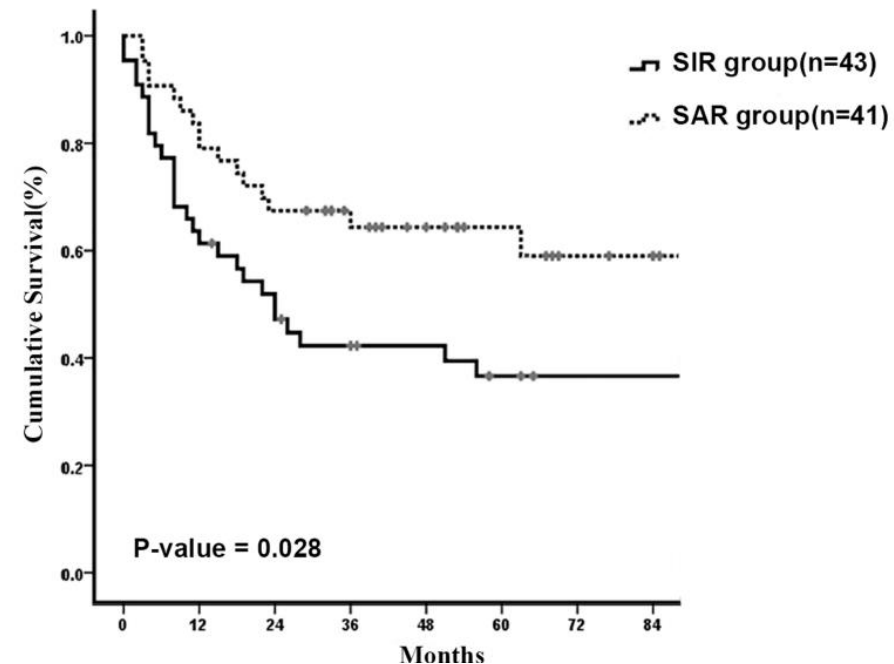
"All cholecystectomy specimens should be examined by the surgeon intraoperatively".

A Comparison Between the Prognosis of Simultaneous and Salvage Radical Resection in Incidental Gallbladder Cancer

Simultaneous (SIR) or Salvage (SAR)



Overall survival



Disease free survival

ORIGINAL ARTICLE

All cholecystectomy specimens must be sent for histopathology to detect inapparent gallbladder cancer

Anil K. Agarwal, Raja Kalayarasan, Shivendra Singh, Amit Javed & Puja Sakhuja

Department of Gastrointestinal Surgery and Pathology, G. B. Pant Hospital and Maulana Azad Medical College, Delhi University, New Delhi, India

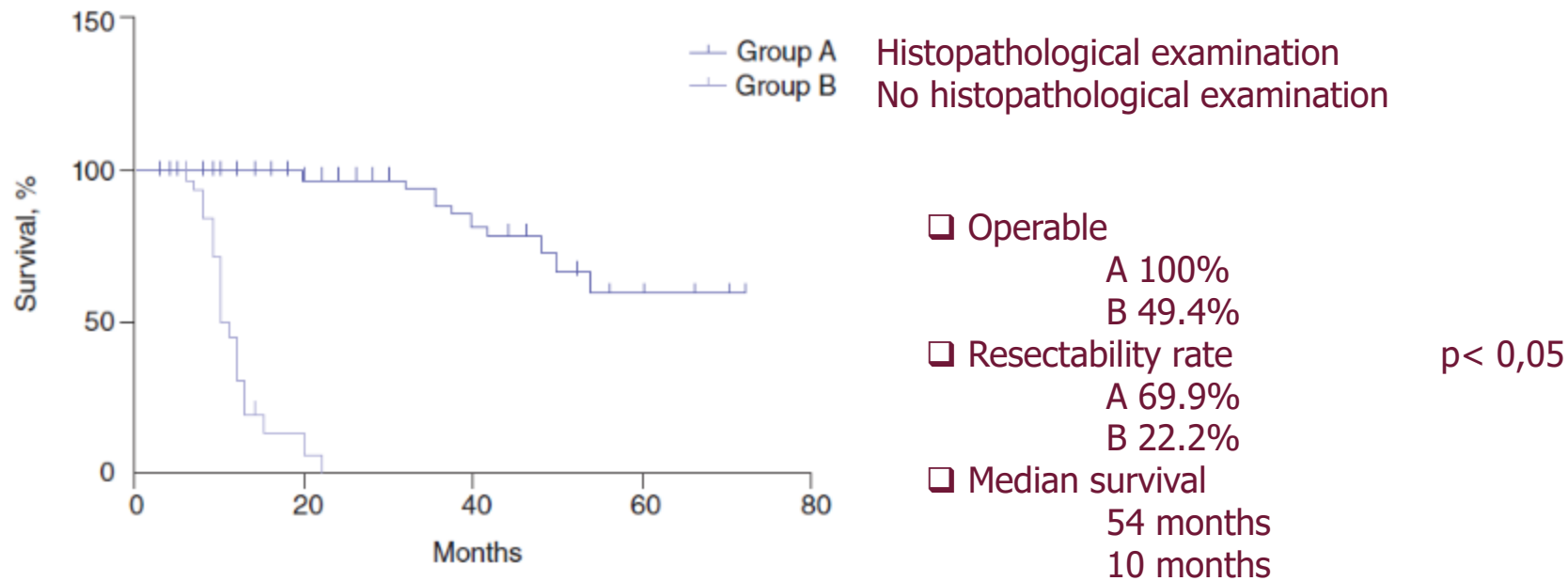


Figure 1 Survival rates in Groups A and B

ROUTINELY

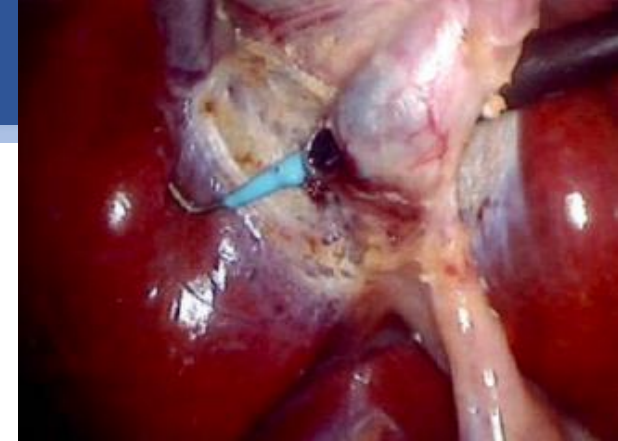
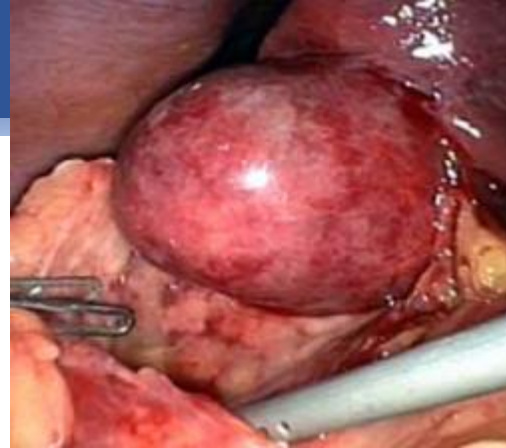
Systematic review

Safe, selective histopathological examination of gallbladder specimens: a systematic review

V. P. Bastiaenen¹ , J. E. Tuijp¹, S. van Dieren¹, M. G. Besselink¹, T. M. van Gulik¹, L. Koens², P. J. Tanis¹ and W. A. Bemelman¹

Table 1 Impact of truly incidental gallbladder cancer on further management									
	Total (n = 448)	Tis (n = 36)	T1a (n = 23)	T1b (n = 35)	T2 (n = 76)	T3 (n = 22)	T4 (n = 2)	T? (n = 249)	Non-primary GBC (n = 5)
Consequences not described	272 (60.7)	12 (33)	5 (22)	8 (23)	29 (38)	6 (27)	2 (100)	208 (83.5)	2 (40)
Consequences described	176 (39.3)	24 (67)	18 (78)	27 (77)	47 (62)	16 (73)	0 (0)	41 (16.5)	3 (60)
No further treatment	86 (48.9)	17 (71)	7 (39)	9 (33)*	26 (55)†	8 (50)‡		19 (46)	
Periodic surveillance	27 (15.3)	5 (21)§	2 (11)¶	1 (4)#		2 (13)**		17 (42)††	
Referral to oncologist, chemotherapy	15 (8.5)	2 (8)‡‡	1 (6)§§	2 (7)¶¶	2 (4)###	1 (6)***		4 (10)†††	3 (100)‡‡‡
Referral to oncologist, outcome unknown	15 (8.5)		7 (39)	6 (22)	1 (2)	1 (6)			
Secondary surgery, < 1-year survival	4 (2.3)				3 (6)§§§	1 (6)¶¶¶			
Secondary surgery, unknown survival	16 (9.1)		1 (6)###	5 (19)****	6 (13)††††	3 (19)‡‡‡‡		1 (2)§§§§	
Secondary surgery, ≥ 1-year survival	13 (7.4)			4 (15)¶¶¶¶	9 (19)####				

INCIDENTAL GALLBLADDER CARCINOMA



❑ INFORMATIONS:

Laparoscopic or laparotomic

Acute cholecystitis

Gallbladder perforation (spillage of bile)

Use of endobag for removal of the gallbladder

Pneumoperitoneum was desufflate with the trocars in situ

Gallbladder was inspected once extracted

Tumor location

Intraoperative bile spillage is associated with worse survival in gallbladder adenocarcinoma

SPILLAGE OF BILE

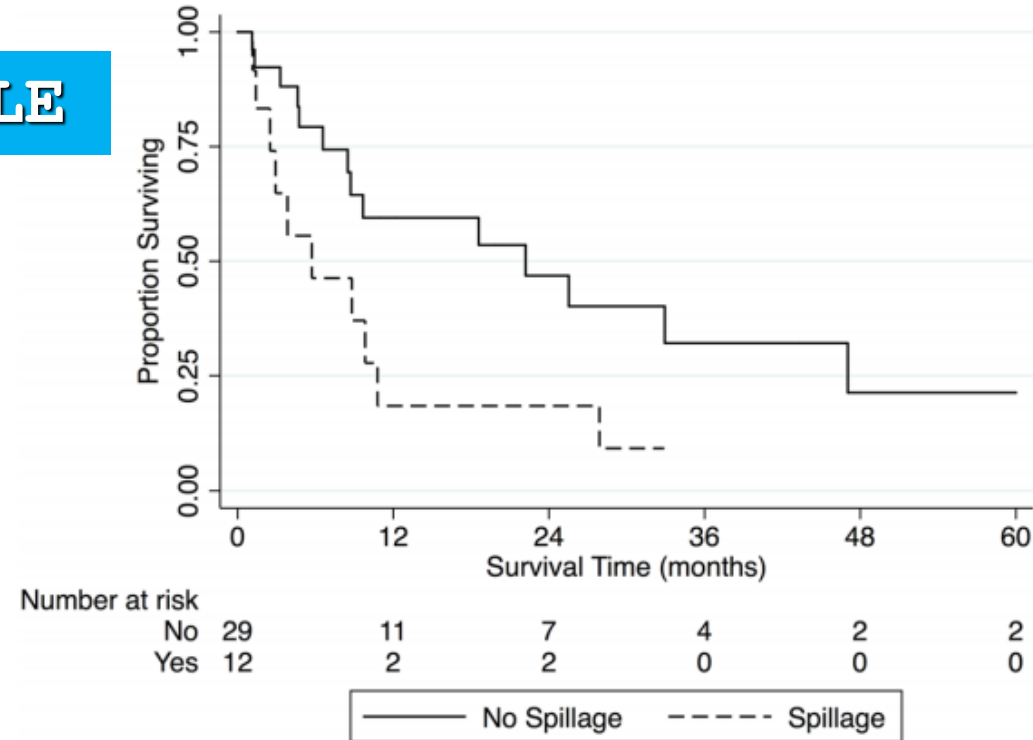


FIGURE 1 Progression-free survival by intraoperative bile spillage; Wilcoxon $P = .038$

AVOID BILE SPILLAGE

Use of Retrieval Bags in Incidental Gallbladder Cancer Cases

Thorsten Oliver Goetze · Vittorio Paolucci

Table 8 Recurrence rate of laparoscopic patients with versus without perforation of the organ

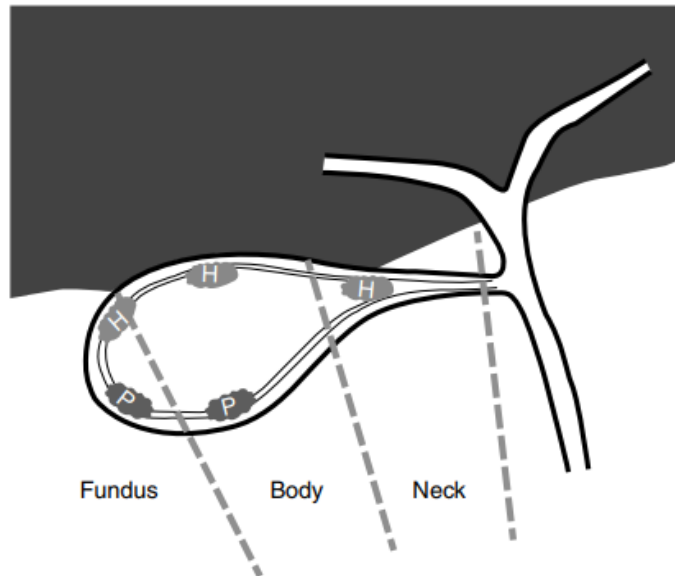
Laparoscopy (total)	No Perforation	Perforation
<i>n</i> = 330	<i>n</i> = 257	<i>n</i> = 73
Relapse	Relapse	Relapse
<i>n</i> = 98 (30%)	<i>n</i> = 70 (27.2%)	<i>n</i> = 28 (38.4%)
χ^2 and Fisher's exact test, $P = 0.047$		

ORIGINAL ARTICLE – HEPATOBILIARY TUMORS

Surgical Strategy for T2 Gallbladder Cancer According to Tumor Location

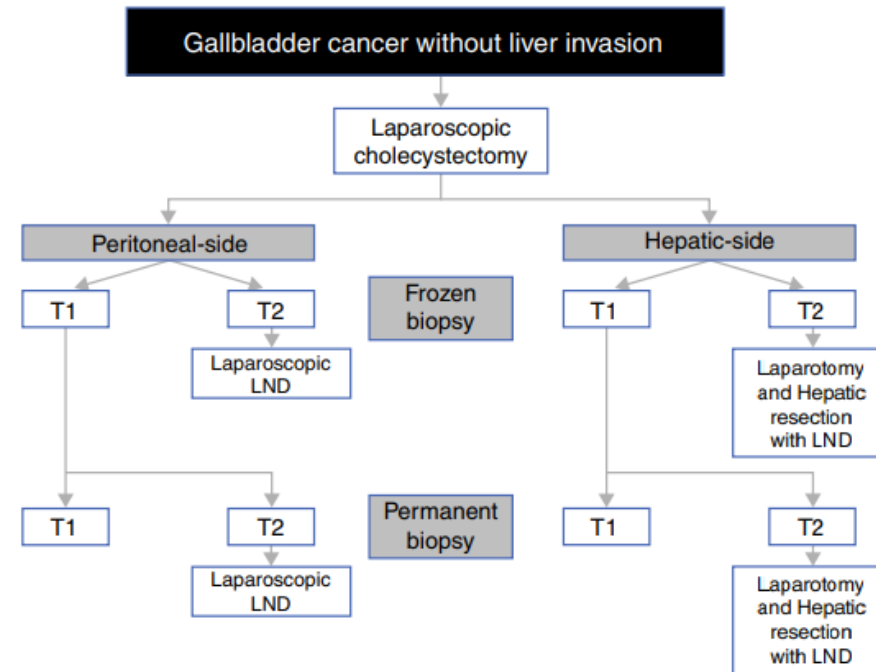
Huisong Lee, MD¹, Dong Wook Choi, MD, PhD¹, Jin Young Park, MD¹, Sangmin Youn, MD¹, Wooil Kwon, MD¹,
 Jin Seok Heo, MD, PhD¹, Seong Ho Choi, MD, PhD¹, and Kee-Taek Jang, MD, PhD²

A

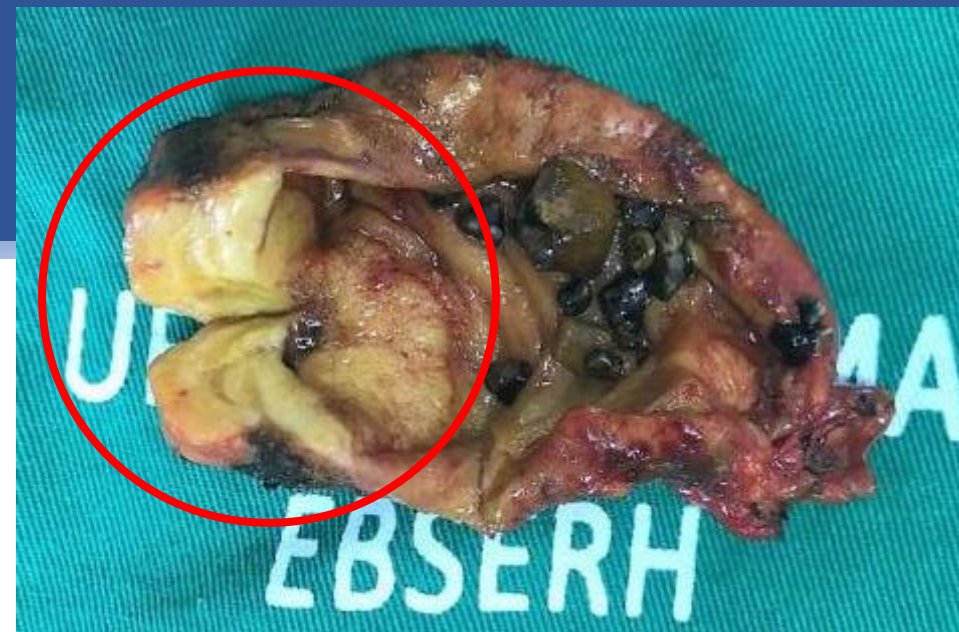
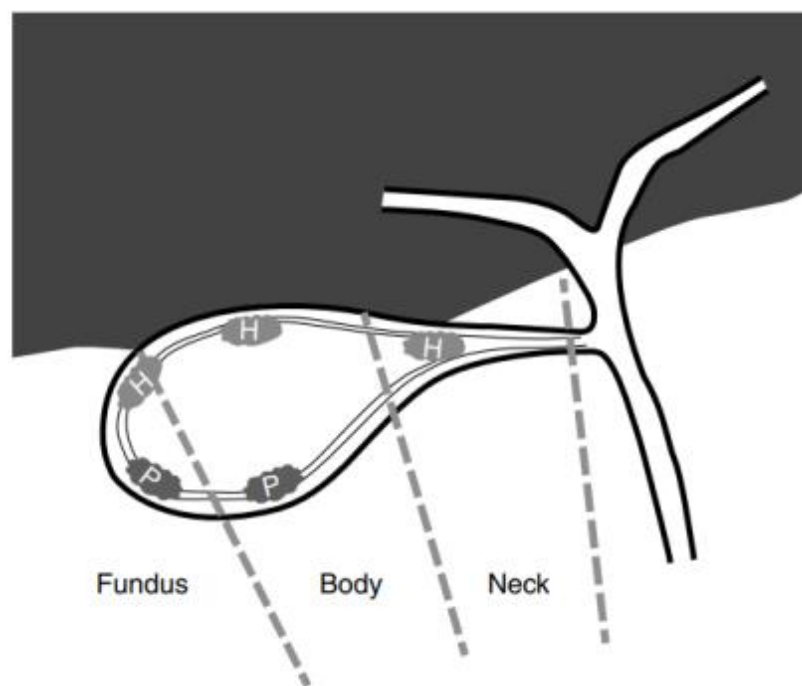


TUMOR LOCATION

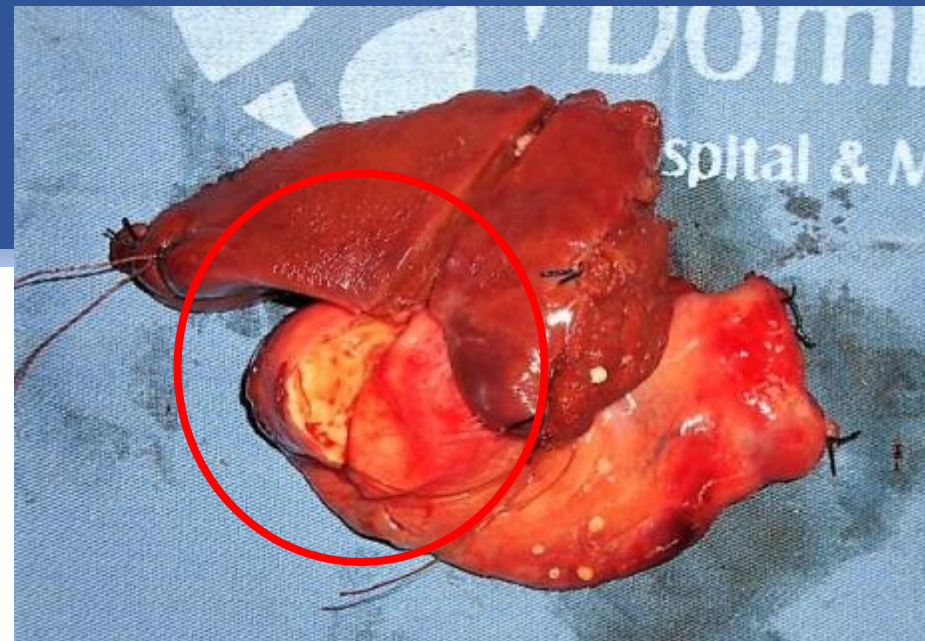
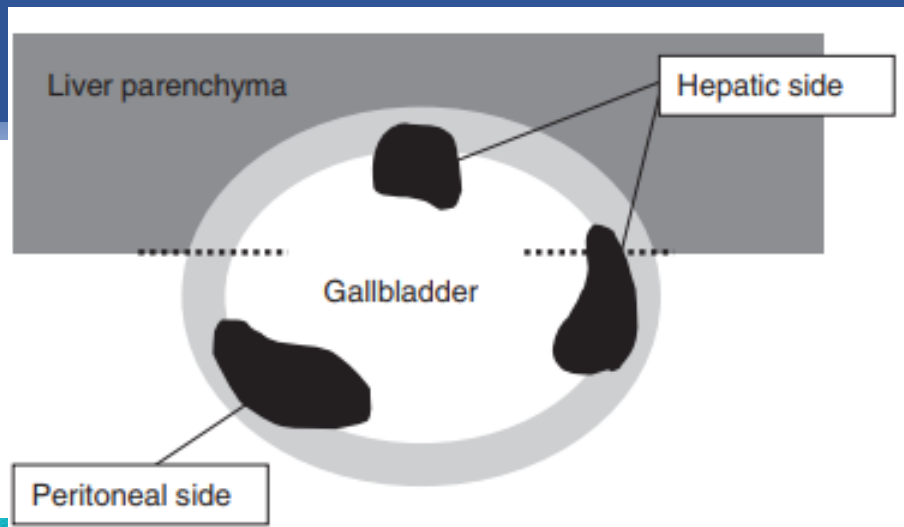
B



TUMOR LOCATION



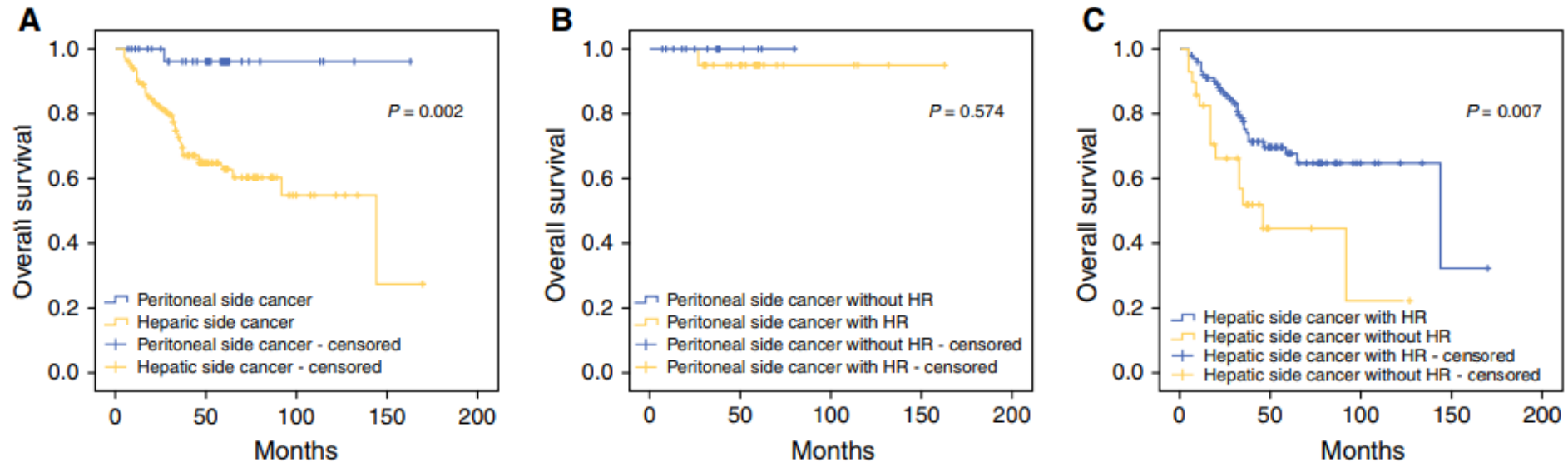
TUMOR LOCATION



ORIGINAL ARTICLE – HEPATOBILIARY TUMORS

Surgical Strategy for T2 Gallbladder Cancer According to Tumor Location

Huisong Lee, MD¹, Dong Wook Choi, MD, PhD¹, Jin Young Park, MD¹, Sangmin Youn, MD¹, Wooil Kwon, MD¹, Jin Seok Heo, MD, PhD¹, Seong Ho Choi, MD, PhD¹, and Kee-Taek Jang, MD, PhD²



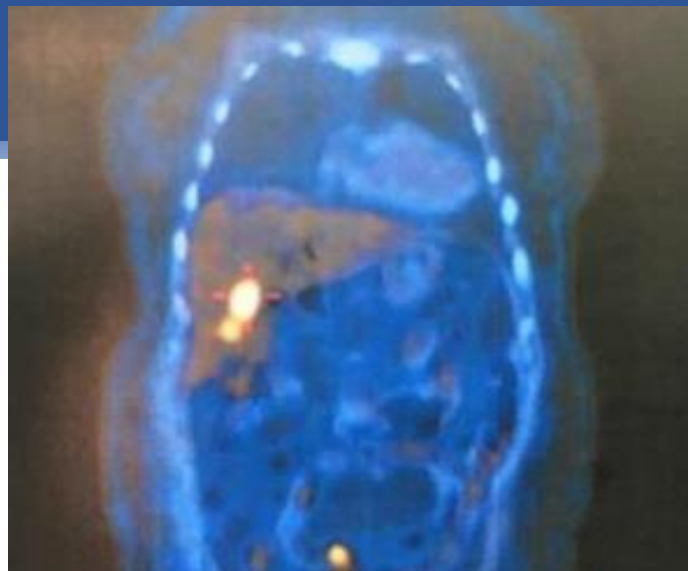
TUMOR LOCATION



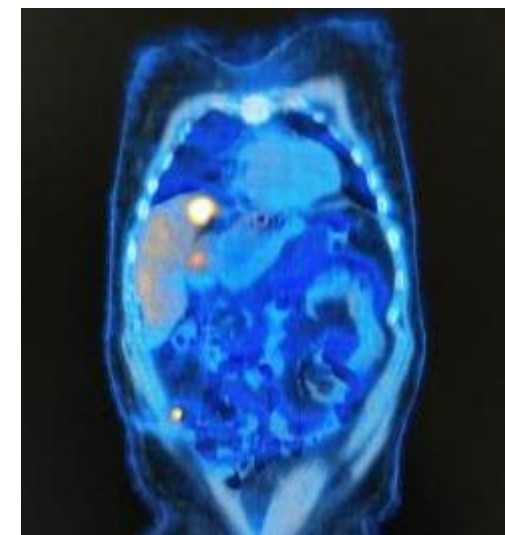
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STAGING FOR GALLBLADDER CARCINOMA



PET-CT





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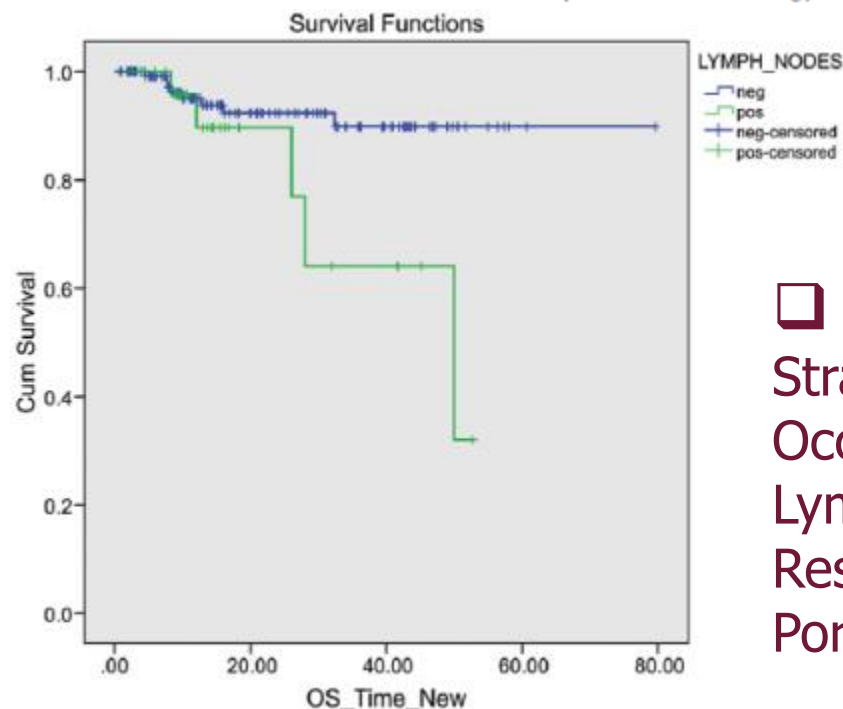
Role of PET CT Scan in Redefining Treatment of Incidental Gall Bladder Carcinoma

MAHESH GOEL, MS,^{1*} ANUP TAMHANKAR, MS, MCh,¹ VENKATESH RANGARAJAN, MD,²
SHRADDHA PATKAR, MS, MCh,¹ MUKTA RAMADWAR, MD,³ AND SHAILESH V. SHRIKHANDE, MS, FRCS¹

¹Gastrointestinal and Hepato-Pancreato-Biliary Surgical Service, Tata Memorial Centre, Mumbai, India

²Department of Nuclear Medicine, Tata Memorial Centre, Mumbai, India

³Department of Pathology, Tata Memorial Centre, Mumbai, India



❑ PET-CT

Stratify patients

Occult peritoneal and/or omental metastases

Lymph node metastases

Residual disease on gallbladder bed

Port site disease

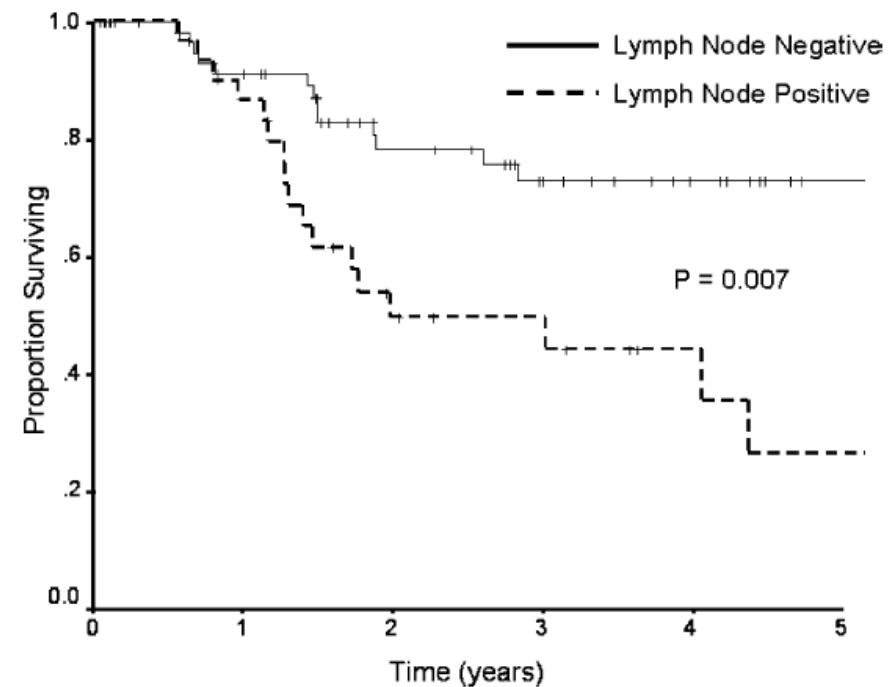
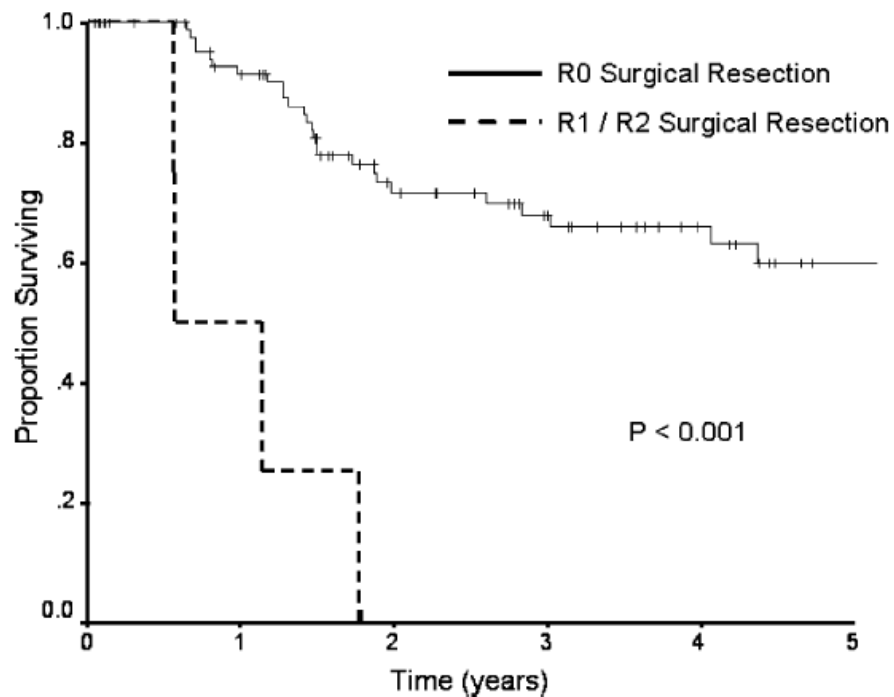
RE-RESECTION

Site of Disease After 2nd Surgery	Number of Patients (%)		
	T1 (<i>n</i> =8)	T2 (<i>n</i> =67)	T3 (<i>n</i> =22)
Disease any site	3 (37.5)	38 (56.7)	17 (77.3)
Residual cancer in liver bed	0 (0)	7 (10.4)	8 (36.4)
Metastatic disease in lymph nodes	1 (12.5)	21 (31.3)	10 (45.5)
Common bile duct			

RESIDUAL DISEASE

RE-RESECTION

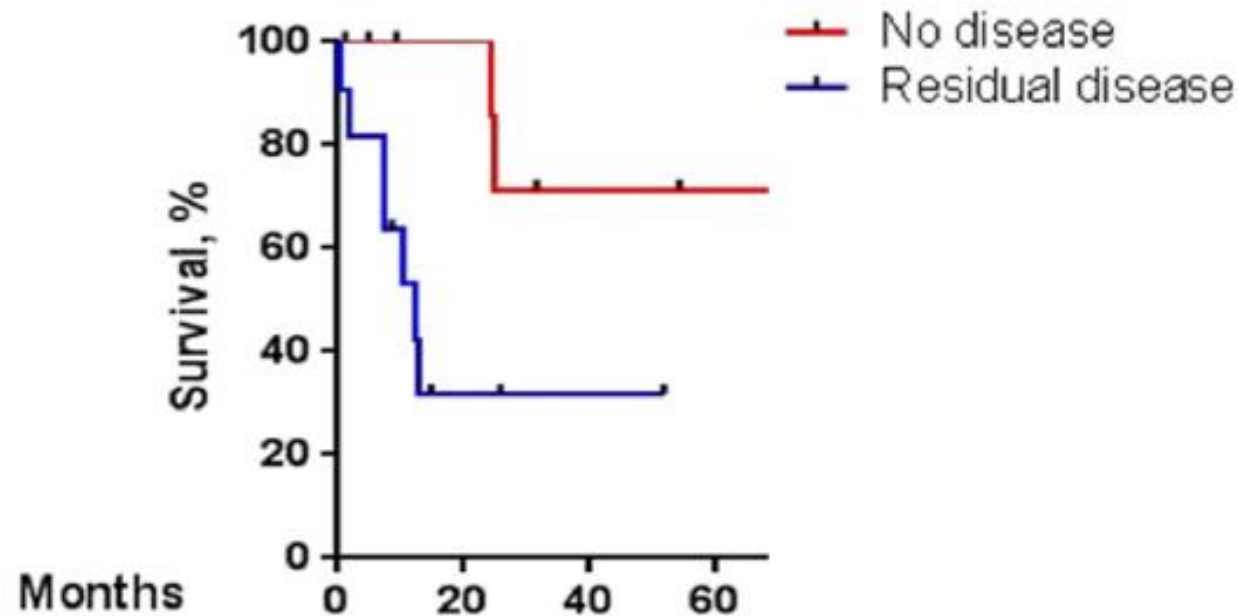
- ☐ R0 resection
- ☐ Lymphadenectomy



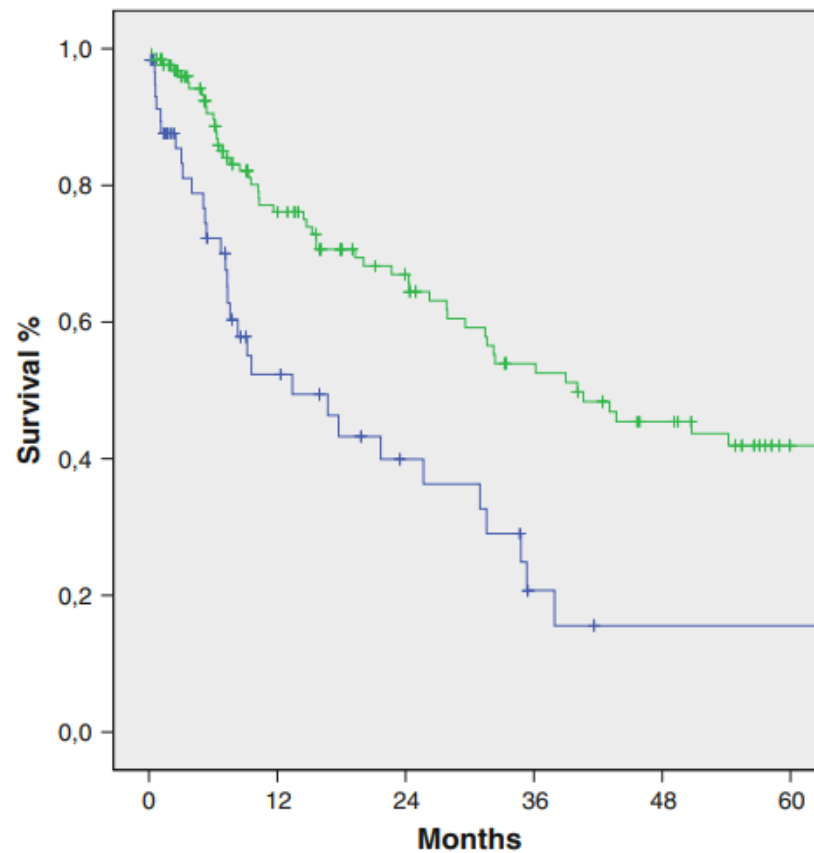
ORIGINAL ARTICLE

Does a second resection provide a survival benefit in patients diagnosed with incidental T1b/T2 gallbladder cancer following cholecystectomy?

Henry Watson¹, Bobby Dasari¹, Judy Wyatt², Ernest Hidalgo¹, Raj Prasad¹, Peter Lodge¹ & Giles Toogood¹



RE-RESECTION



Re-resection (n=148)			
	1-year	3-year	5-year
Overall survival	76%	54%	41%
Patients at risk	n=76	n=39	n=39
No re-resection (n=70)			
	1-year	3-year	5-year
Overall survival	52%	20%	15%
Patients at risk	n=19	n=4	n=1

ORIGINAL SCIENTIFIC REPORT

What is the Better Choice for T1b Gallbladder Cancer: Simple Versus Extended Cholecystectomy

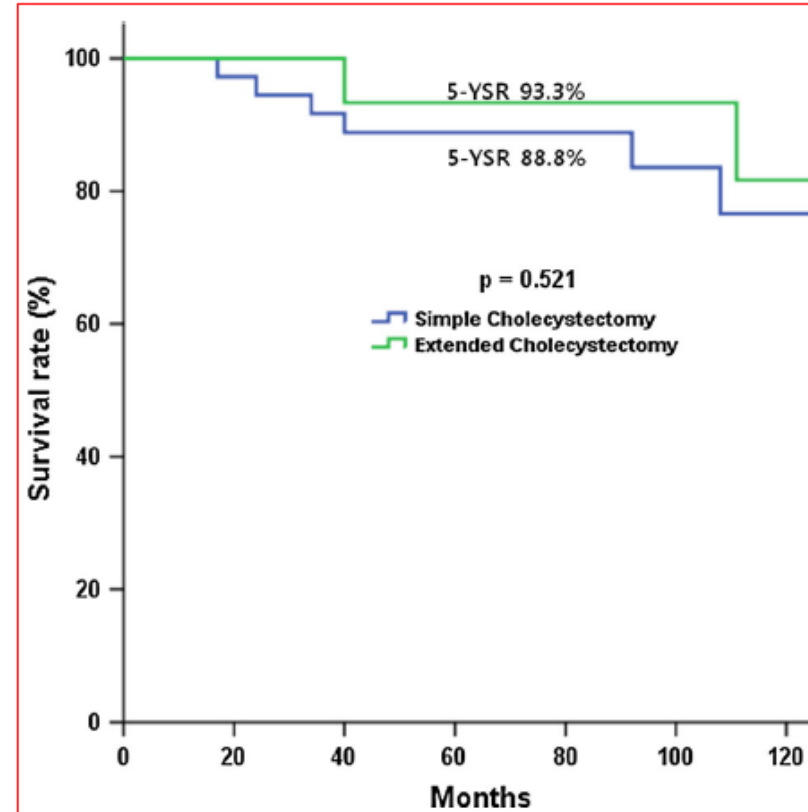
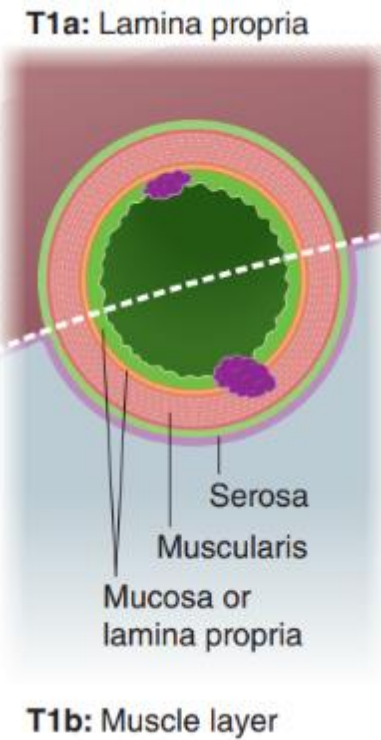


Fig. 3 Kaplan–Meier survival curves according to operation type.
5-YSR 5-year survival rate

What is the Better Choice for T1b Gallbladder Cancer: Simple Versus Extended Cholecystectomy

Table 3 Patients showing recurrence

Age/sex	First operation	Second operation	Recurrence (months)	Site of recurrence	Additional treatment	Alive/dead
72/F	SC	Palliative BDR	36	EHBD, both IHBD	CTx	Alive
79/F	SC	–	17	LN _s (hepatoduodenal, CHA, para-aortic)	–	Dead
71/F	SC	–	14	LN _s (Porta-caval, para-aortic)	–	Dead
56/F	SC	LLS	4	Liver	–	Alive
60/F	C + B ^a	–	47	Pancreas head, LN _s , peritoneum	CTx.	Dead
59/F	C + B	–	44	LN _s (anterior to IVC)	CTx + RTx	Dead

^a Cholecystectomy + BDR (incomplete LND)

CHA common hepatic artery, CTx chemotherapy, EHBD extra-hepatic bile duct, IHBD intrahepatic bile duct, IVC inferior vena cava, LLS left lateral segmentectomy, LN lymph node, LND lymph node dissection, RTx radiotherapy

1. T1b or more (including cystic duct)
2. Positive cystic duct lymph node

☐ EXTENDED CHOLECYSTECTOMY
☐ REGIONAL LYMPH NODE DISSECTION

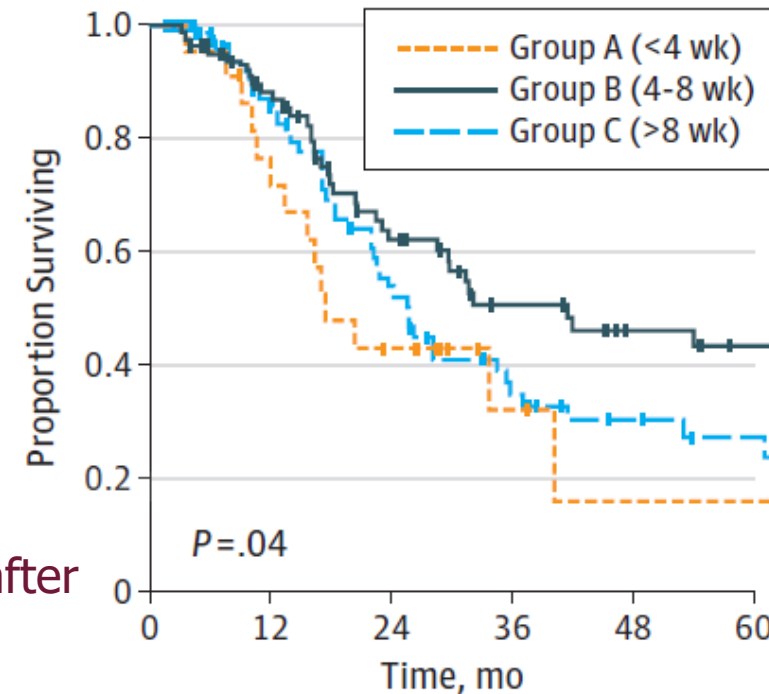
TIME TO RE-RESECTION

JAMA Surgery | Original Investigation

Association of Optimal Time Interval to Re-resection for Incidental Gallbladder Cancer With Overall Survival A Multi-Institution Analysis From the US Extrahepatic Biliary Malignancy Consortium

Cecilia G. Ethun, MD; Lauren M. Postlewait, MD; Nina Le, BS; Timothy M. Pawlik, MD, MPH, PI
Stefan Buettner, MD; George Poultsides, MD; Thuy Tran, MD; Kamran Idrees, MD; Chelsea A.
Ryan C. Fields, MD; Linda X. Jin, MD; Sharon M. Weber, MD; Ahmed Salem, MD; Robert C. G. I
Charles Scoggins, MD; Perry Shen, MD; Harveshp D. Mogal, MD; Carl Schmidt, MD; Eliza Beal,
Ioannis Hatzaras, MD; Rivfka Shenoy, MD; David A. Kooby, MD; Shishir K. Maithel, MD

C OS since cholecystectomy



□ Time to re-resection
Appears to be between 4 and 8 weeks after
the initial cholecystectomy. $p < 0,05$



BRAZILIAN CONSENSUS ON INCIDENTAL GALLBLADDER CARCINOMA

Consenso brasileiro de carcinoma incidental de vesícula biliar

On behalf of the "International Study Group of Hepatopancreatobiliary Cancer- ISG-HPB-Cancer",

Question 5

Which is the ideal timeframe between cholecystectomy and radical surgery for incidentally discovered gallbladder cancer?

Reoperation should be performed as early as possible once final histopathological staging is available, metastatic workup is complete and patients is fit for reoperation which may take 2-4 weeks after index cholecystectomy depending on the time of referral and the stage of the disease.

2-4 WEEKS

The Role of Staging Laparoscopy in Primary Gall Bladder Cancer—An Analysis of 409 Patients

A Prospective Study to Evaluate the Role of Staging Laparoscopy in the Management of Gallbladder Cancer

Anil K. Agarwal, MCh, Raja Kalayarasan, MCh, Amit Javed, MCh, Nikhil Gupta, MCh, and Hirdaya H. Nag, MS

- ❑ Avoid unnecessary surgery (38-62%)
- ❑ Oncologic irreseccability in up 23%
- ❑ High incidence of positive findings
- ❑ Recommended for re-resection

LAPAROSCOPIC STAGING



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LAPAROSCOPIC STAGING



Ascites



Carcinomatosis

❑ Frozen section of lymph node 16b1



Liver metastasis





ORIGINAL ARTICLE

Role of routine 16b1 lymph node biopsy in the management of gallbladder cancer: an analysis

Anil K. Agarwal, Raja Kalayarasan, Amit Javed & Puja Sakhuja

Department of Gastrointestinal Surgery and Pathology, Govind Ballabh Pant Hospital and Maulana Azad Medical College, Delhi University, New Delhi, India

Table 1 Clinicopathological characteristics in gallbladder cancer (GBC) patients with 16b1 lymph node (LN) metastases (Group A) and without 16b1 LN metastases (Group B)

Characteristics	Group A (n = 34)	Group B (n = 149)	P-value
Clinical stage, n (%)			
Early GBC	2 (5.9%)	23 (15.4%)	0.175
Locally advanced GBC	32 (94.1%)	126 (84.6%)	
Jaundice	11 (32.4%)	18 (12.1%)	0.008
Gastric outlet obstruction	4 (11.8%)	5 (3.4%)	0.063
Incidental GBC, n (%)			
Stage T1b	–	6 (4.0%)	1.000
Stages T2 and T3	2 (5.9%)	23 (15.4%)	
Tumour markers			
CEA, ng/ml, median (range)	21.7 (2.3–189)	10.6 (2.7–105)	0.012
CA 19-9, U/ml, median (range)	181.5 (10.3–1081)	79.3 (12.6–313)	0.023

CEA, carcinoembryonic antigen; CA 19-9, carbohydrate antigen 19-9.

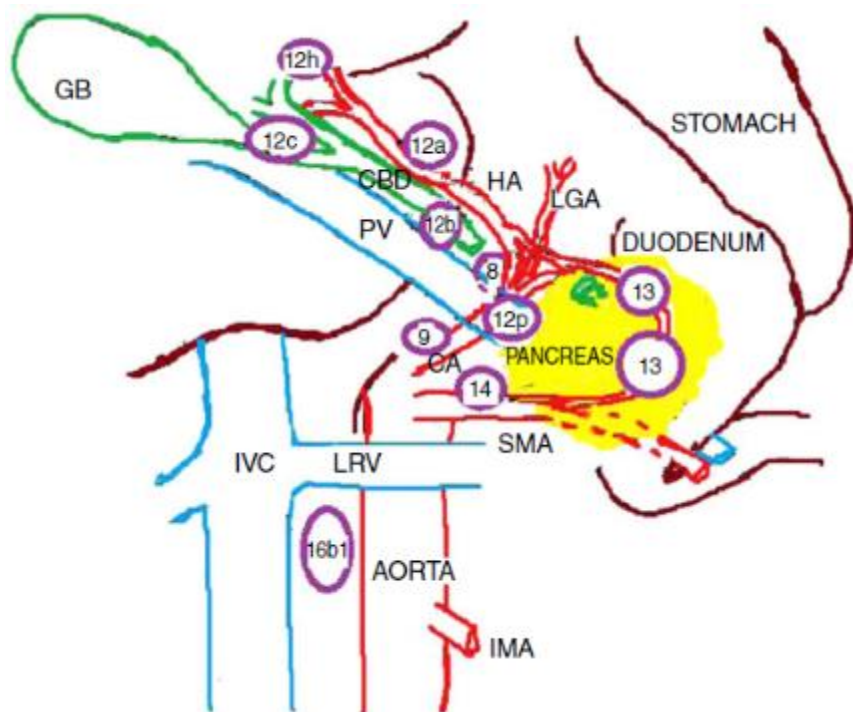


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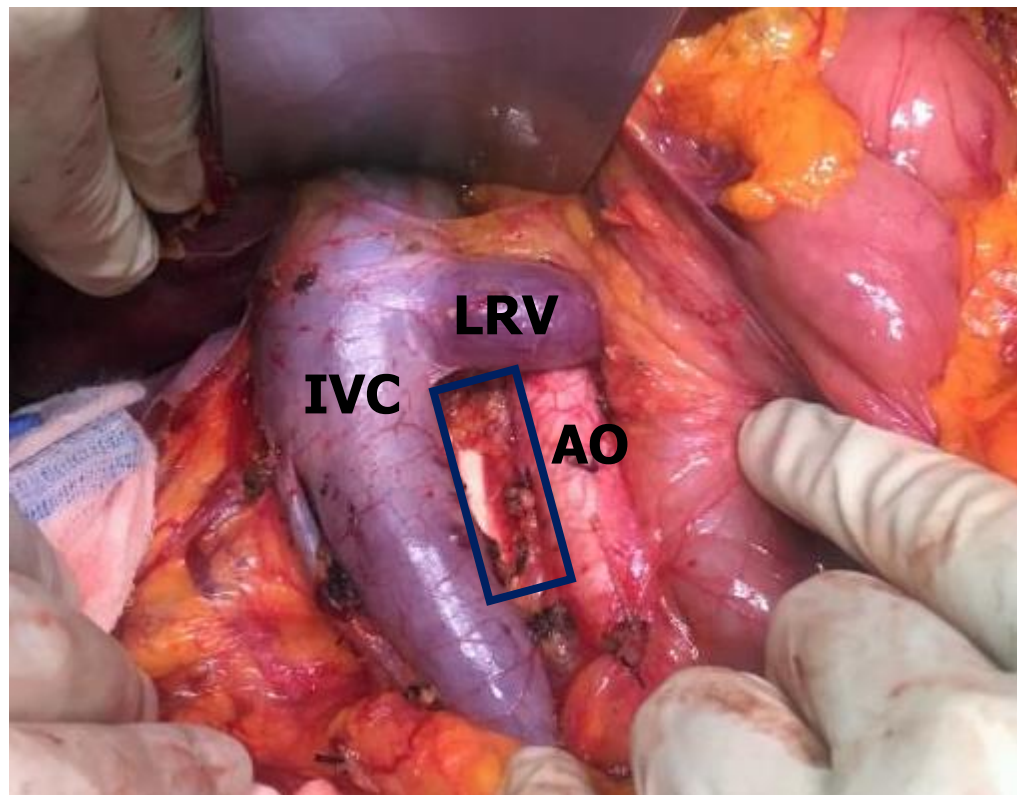
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LYMPH NODE BIOPSY

❑ Frozen section of lymph node 16b1



POSITIVE



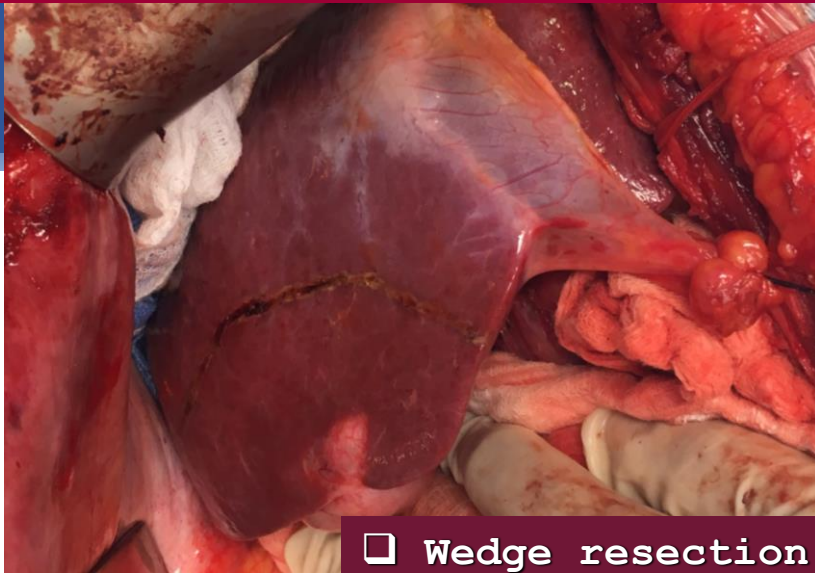
DO NOT PROCEED THE SURGERY



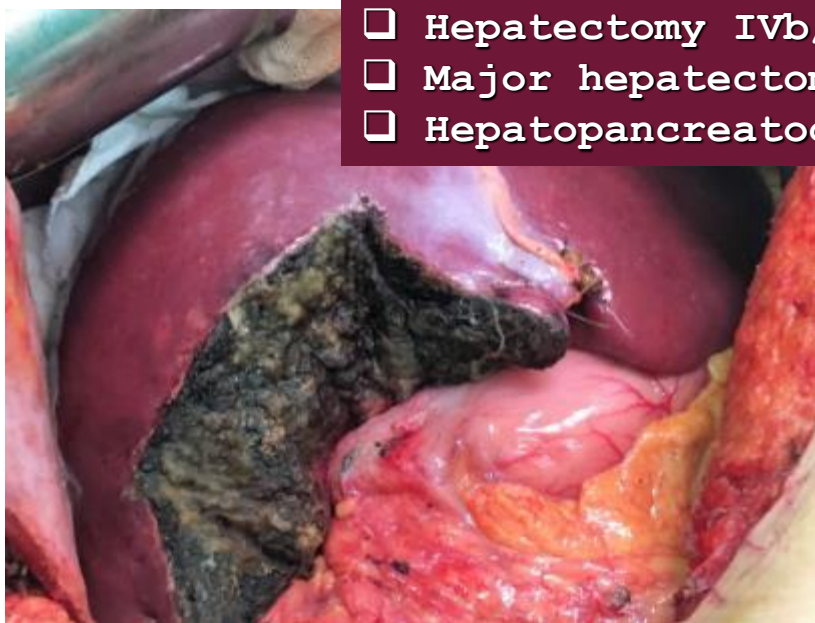
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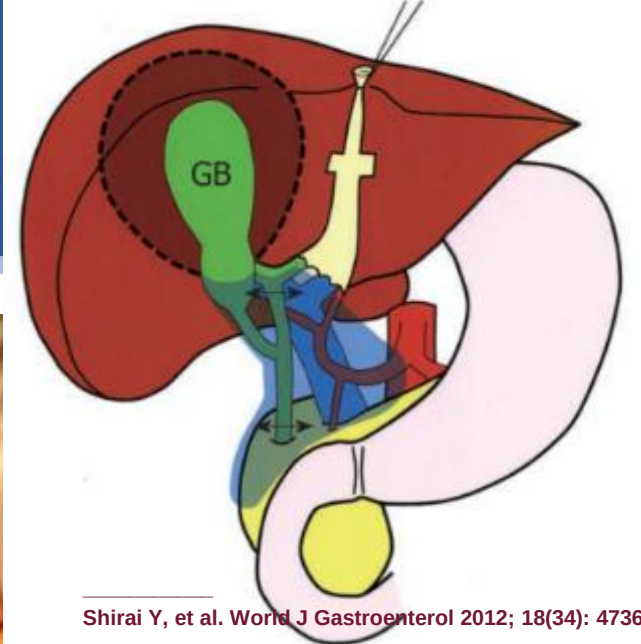
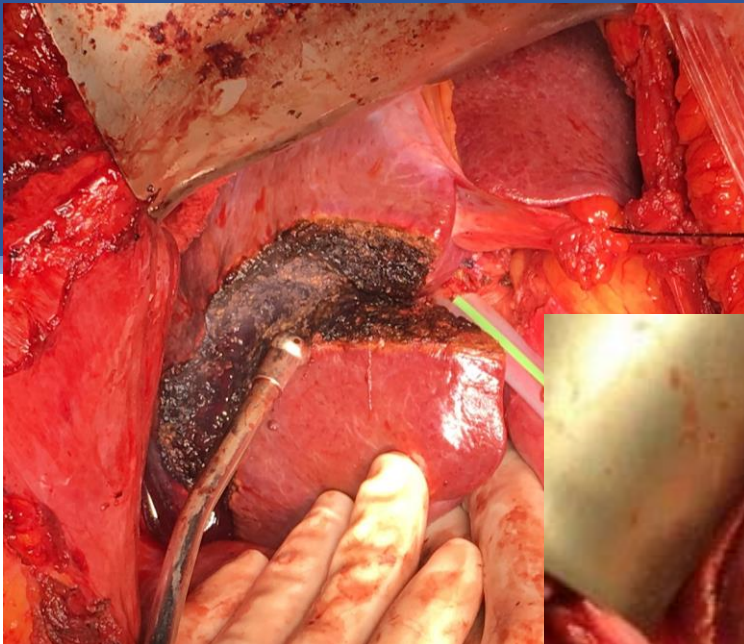
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EXTENT OF LIVER RESECTION

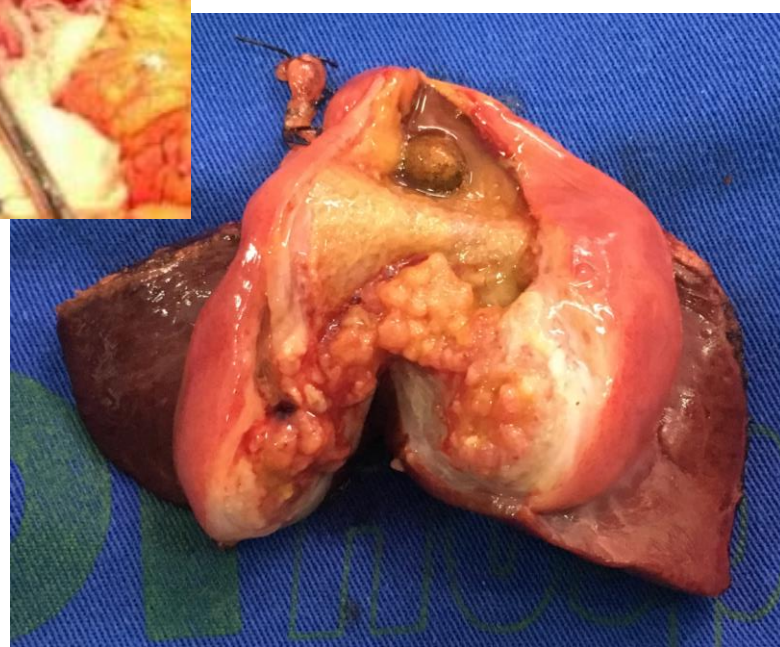


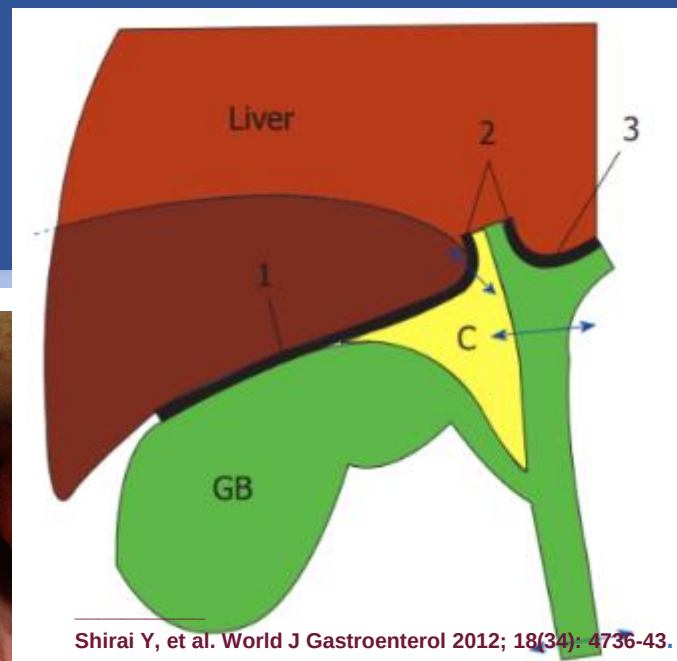
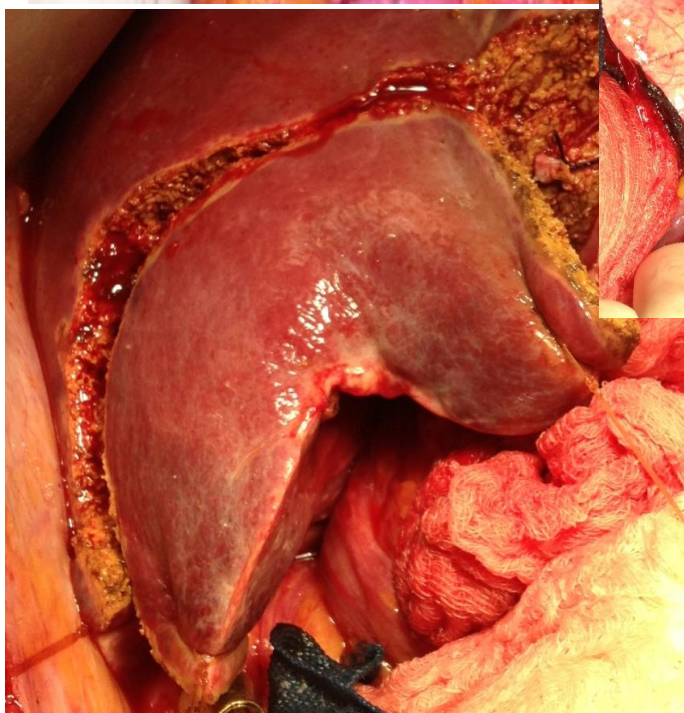
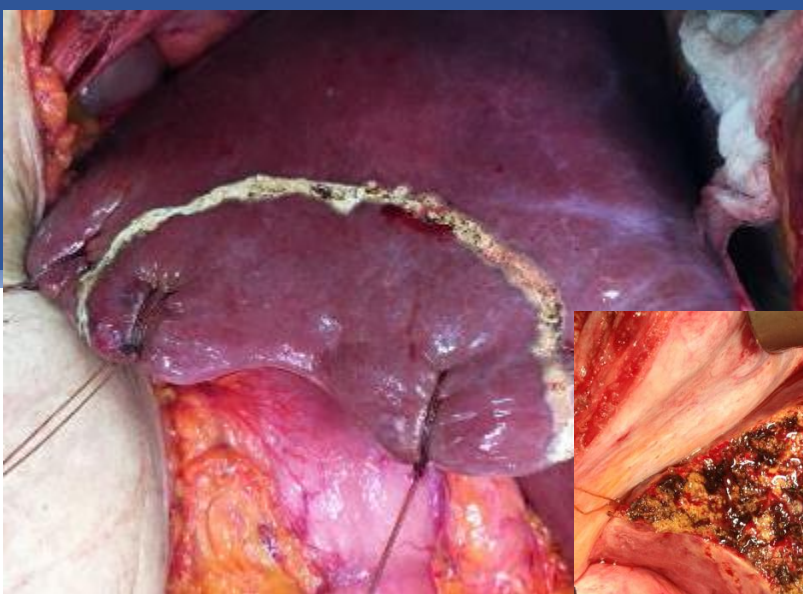
- ☐ Wedge resection
- ☐ Hepatectomy IVb/V
- ☐ Major hepatectomy
- ☐ Hepatopancreatoduodenectomy





Shirai Y, et al. World J Gastroenterol 2012; 18(34): 4736-43.







ELSEVIER

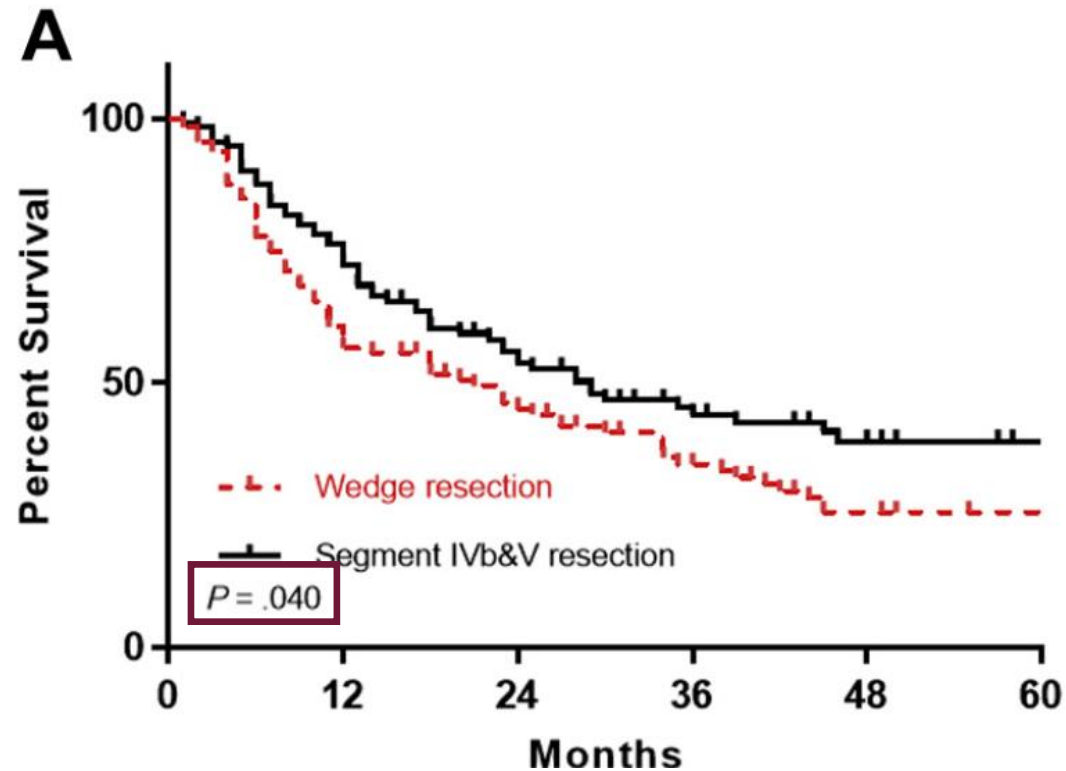
Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Surgery

journal homepage: www.elsevier.com/locate/surg



Hepatectomy strategy for T2 gallbladder cancer between segment IVb and V resection and wedge resection: A propensity score-matched study





Optimal surgical management for T2 gallbladder cancer-formal 4b-5 resection

Alejandro Serrablo, MD, PhD*

HPB Surgical Division. Miguel Servet University Hospital, Zaragoza (Spain)

Luis Tejedor, MD

Department of Surgery. Punta Europa Hospital, Algeciras, Spain

Orlando J. Torres, MD, PhD

Department of Gastrointestinal Surgery, Hepatopancreatobiliary Unit – Maranhão Federal University, Brazil

THE LARGEST WESTERN EXPERIENCE WITH HEPATOPANCREATODUODENECTOMY: LESSONS LEARNED WITH 35 CASES

A maior experiência ocidental com hepatopancreatoduodenectomia: lições aprendidas com 35 casos

Eduardo de Souza Martins **FERNANDES**^{1,2}, Felipe Tavares de **MELLO**², Joaquim **RIBEIRO-FILHO**¹,
Asterio Pinto do **MONTÉ-FILHO**¹, Moacir Martins **FERNANDES**³, Romulo Juventino **COELHO**²,
Monique Couto **MATOS**², Antonio Augusto Peixoto de **SOUZA**¹, Orlando Jorge Martins **TORRES**⁴

TABLE 1 – Indications for hepatopancreatoduodenectomy

Diagnosis	Indication	n
Gallbladder cancer (n=18)	Peripancreatic lymph nodes metastasis	4
	Diffuse biliary infiltration	4
	Duodenal/pancreatic invasion	10
Klatskin tumor (n= 8)	Distal bile duct infiltration	3
	Direct pancreatic invasion	5
Neuroendocrine tumors (n=5)	Duodenal invasion from recurred cancer	1
Colorectal metastasis (n=1) Metastatic intraductal papillary	Liver metastasis and pancreatic tumor	4
	Recurrent liver tumor with duodenal invasion	1
Mucinous neoplasm (n=1)	Direct liver infiltration	1
Metastatic melanoma (n=1)	Metastatic ocular melanoma	1
Gastric cancer recurrence (n=1)	Tumor invasion to liver and pancreatic head	1

TABLE 3 - Patients follow-up

Age/ Sex	Group Diagnosis Recurrence	Year	Diagnosis	Recurrence	Alive	Cause of death	Survival
66M	1	2005	GBC	No	Yes	NA	9 years
70F	2	2006	Melanoma No	Yes	NA	8 years	
63M	2	2006	Hilar CC	Yes	No	Recurrence 39 months	
71F	3	2008	Hilar CC	No	No	Sepsis	15 months
69M	4	2008	GBC	No	Yes	NA	6 years
59M	1	2009	GBC	Yes	No	Recurrence 9 months	
61F	4	2010	GBC	Yes	No	Recurrence 27 months	
52M	4	2010	GBC	Yes	No	Recurrence 22 months	
56F	4	2012	GBC	No	Yes	NA	2 years
53F	4	2013	NET	No	Yes	NA	1 year
55M	3	2014	Gastric CA No	Yes	NA	1 year	
49F	4	2014	GBC	No	Yes	NA	6 months

GBC=gallbladder cancer; NET=neuroendocrine tumor; Hilar CC=hilar cholangiocarcinoma

Mortalidade 34,2%



Original Research

Extended liver surgery for gallbladder cancer revisited: Is there a role for hepatopancreatoduodenectomy?

Orlando Jorge M Torres^{a,*}, Ruslan Alikhanov^b, Jun Li^c, Alejandro Serrablo^d, Albert C. Chan^e, Eduardo de Souza M Fernandes^f

Table 2

Indications and contraindications for HPD in gallbladder cancer.

Indications

Locally advanced disease:

- Tumors originating from the fundus or body (“Liver-bed” type)
- Tumors involving the hepatic hilus (“Hepatichilus” type)
- Tumors forming a bulky mass (“Liver-bed and hepatichilus” type)
- Tumors with extensive local lymph nodes metastases (“Lymph-nodal” type)

Ebata T et al. J Hepatobiliary Pancreat Surg (2007)

Contraindications

- Macroscopic noncurative resections
- Distant metastasis
- Para-aortic lymph node metastases
- Peritoneal seeding
- Chronic liver disease
- Severe comorbidities

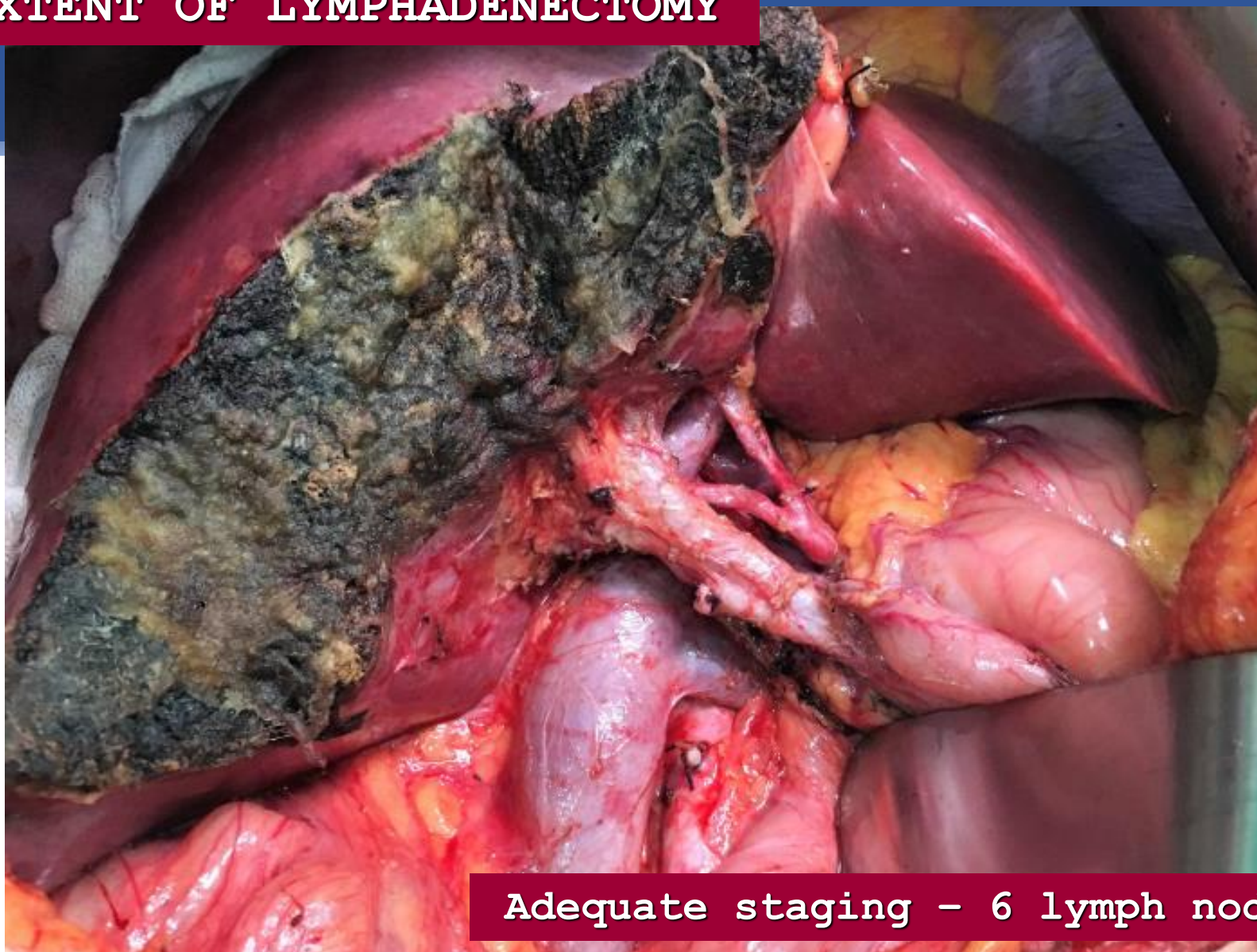
Highly selected cases



CBC

Colégio Brasileiro de Cirurgiões

EXTENT OF LYMPHADENECTOMY



Adequate staging – 6 lymph nodes





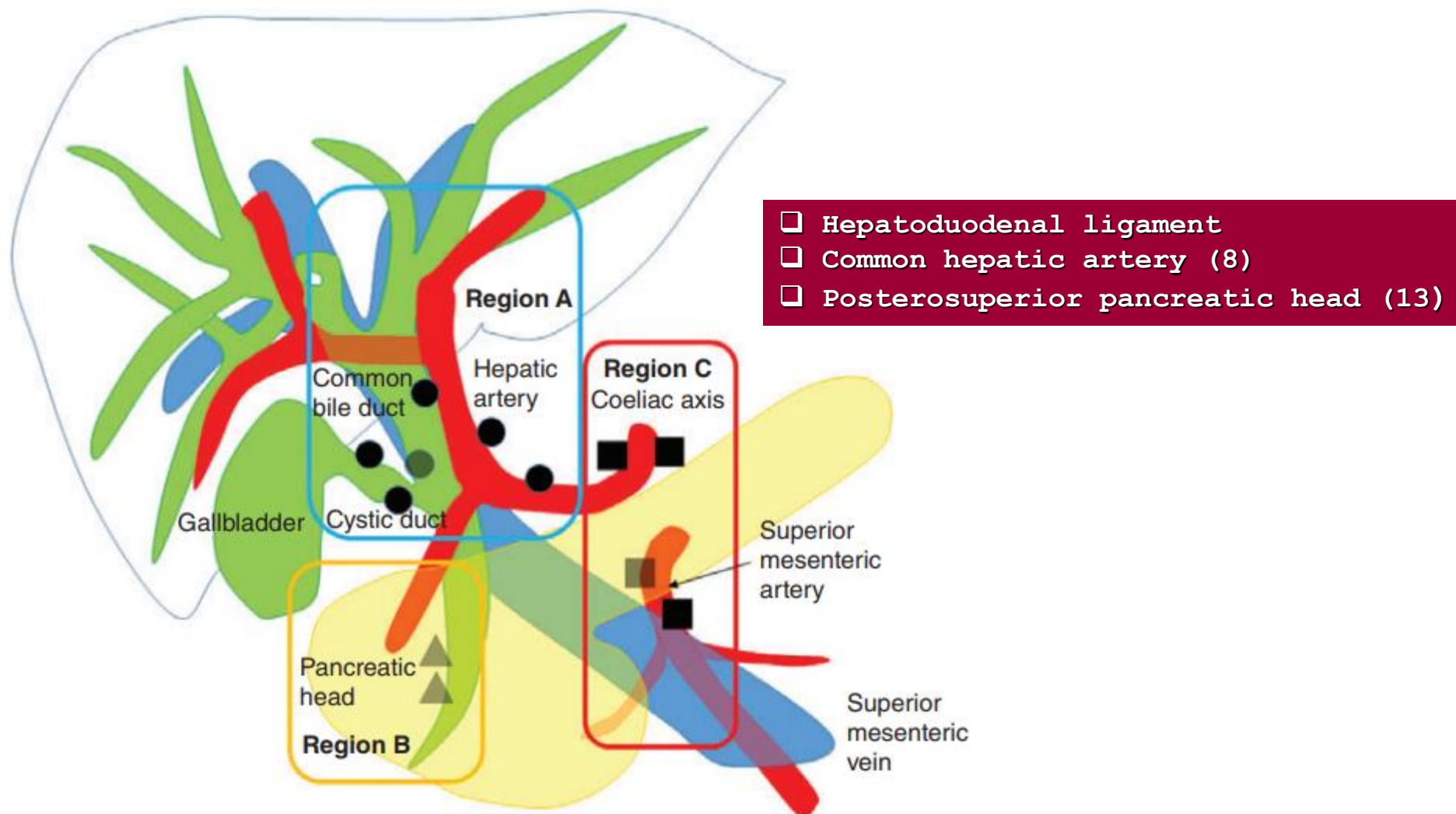
CBC

Colégio Brasileiro de Cirurgiões

Original article

Extent of lymph node dissection in patients with gallbladder cancer

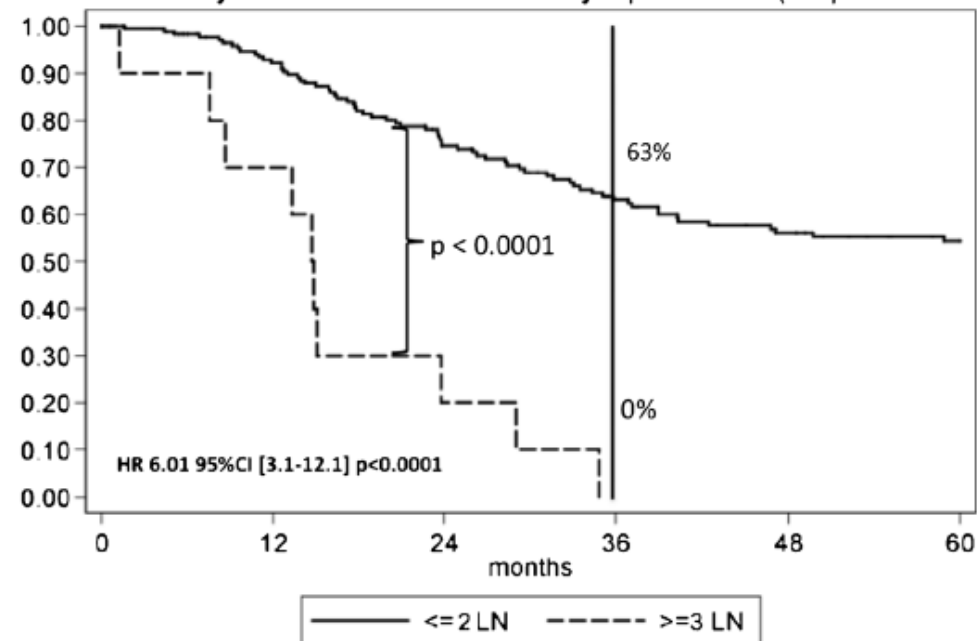
Y. Kishi¹, S. Nara¹, M. Esaki¹, N. Hiraoka² and K. Shimada¹



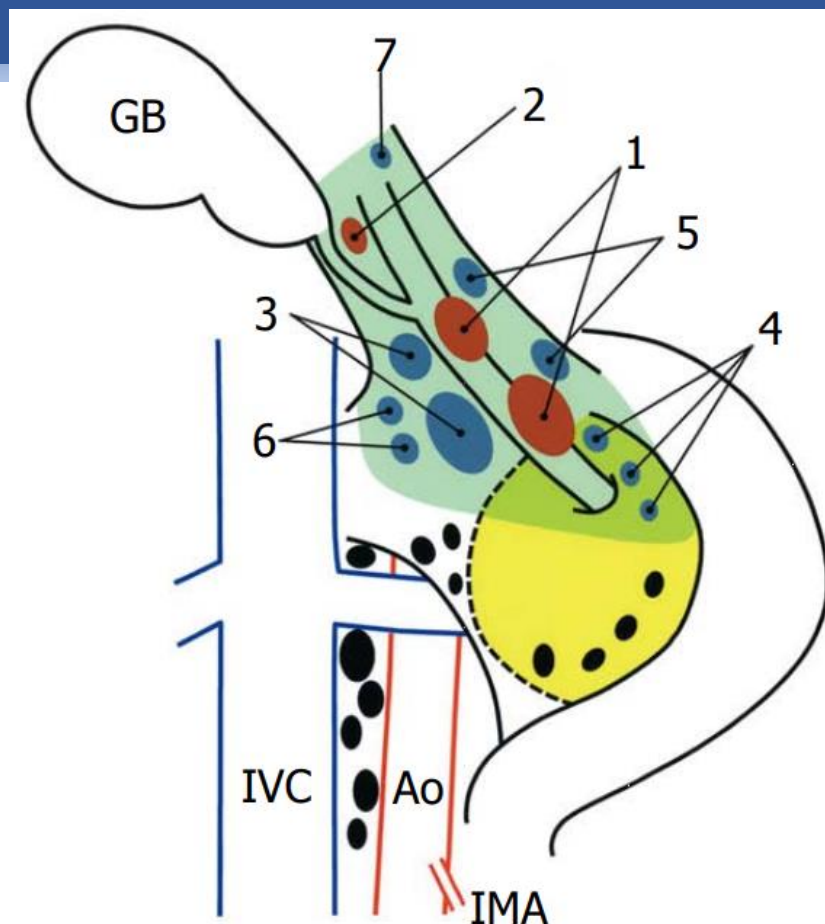
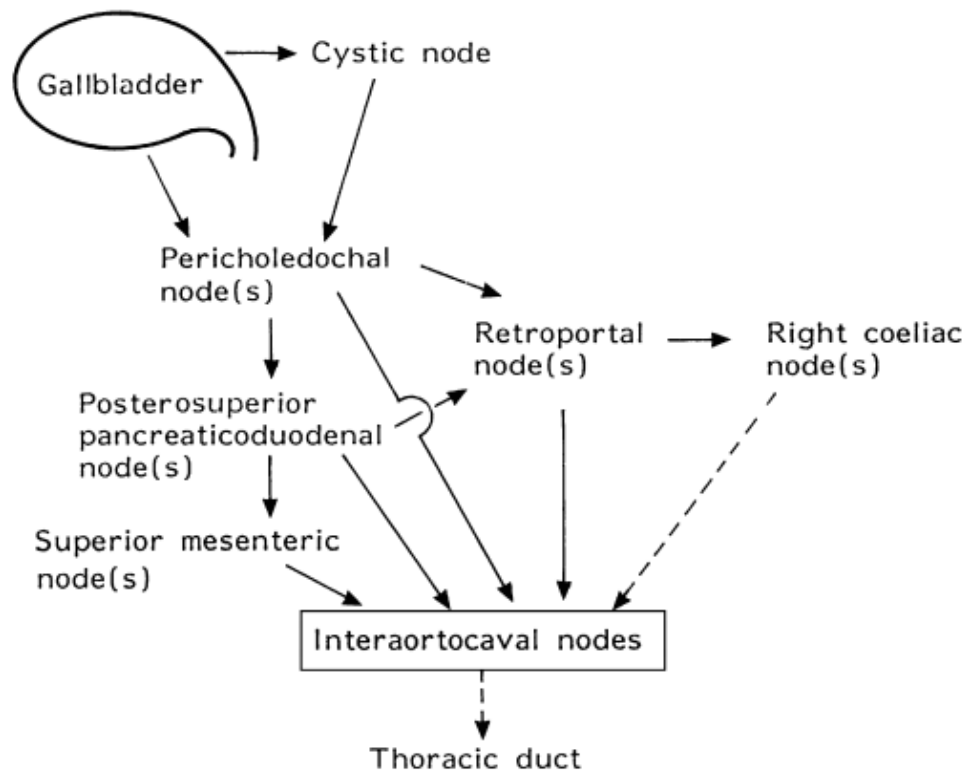
Extended Lymphadenectomy Is Required for Incidental Gallbladder Cancer Independent of Cystic Duct Lymph Node Status

Eduardo A. Vega^{1,2} • Eduardo Vinuela^{2,3} • Suguru Yamashita^{1,4} • Marcel Sanhueza^{2,3} • Gabriel Cavada⁵ • Cristian Diaz^{2,3} • Thomas A. Aloia¹ • Yun Shin Chun¹ • Ching-Wei D Tzeng¹ • Masayuki Okuno¹ • Claire Goumard¹ • Jean-Nicolas Vauthey¹ • Jeffrey E. Lee¹ • Claudius Conrad¹ 

Survival by Number Metastatic Lymph Node (Kaplan-Meier)



EXTENT OF LYMPHADENECTOMY





Effect of lymphadenectomy in curative gallbladder cancer treatment: a systematic review and meta-analysis

Bernhard Widmann¹  · Rene Warschkow¹ · Ulrich Beutner¹ · Michael Weitzendorfer² · Kristjan Ukegjini¹ · Bruno M. Schmied¹ · Ignazio Tarantino¹ · Thomas Steffen¹

Table 3 Effect of lymphadenectomy extent on survival

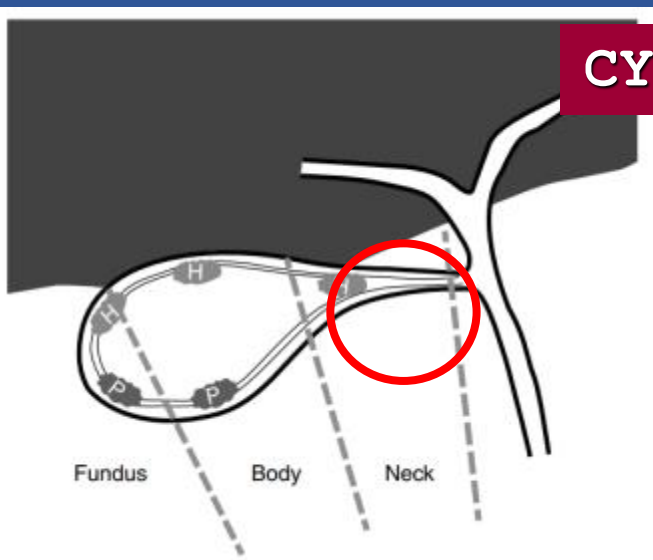
Author	Stage	n	Number of lymph nodes retrieved								P	
			0	1	2	3	4	5	6	7		8+
Mayo	Tis-T3	2955	n=2750			n=205 (benefit especially for T2 and T3)					<0.001	
Ito	T1b-T3	122	-	n=45 (DSS N0: 42, N1: 27)		n=77 (DSS: N0: NR, N1: 24)					0.047	
Liu	T1b-T3 N0	81	-	n=60 (DFS: 22)					n=21 (DFS: NR)		<0.001	
	0-IV	78	-	DSS: 18					DSS: 33		0.018	
	N1/2	37	-	DSS: 15					DSS: 33		<0.001	
Tran	I-IV	8436	62%								<0.001	
Downing	T1-T2	2495	n=1706	n=698				91			<0.001	
Birnbaum	T1b-T4	112	-	OS: 28%					OS: 32%		>0.05	
Kim	T2-T4	128	-									0.397
	T3	60	-	OS: 14						OS: 108	0.003	
			D1				D2					

D1

D2

- ☐ Cistic duct evaluation routinely
- ☐ Cistic duct not identified during re-resection
- ☐ Lymph node involving the biliary tract
- ☐ Adequate lymphadenectomy not possible

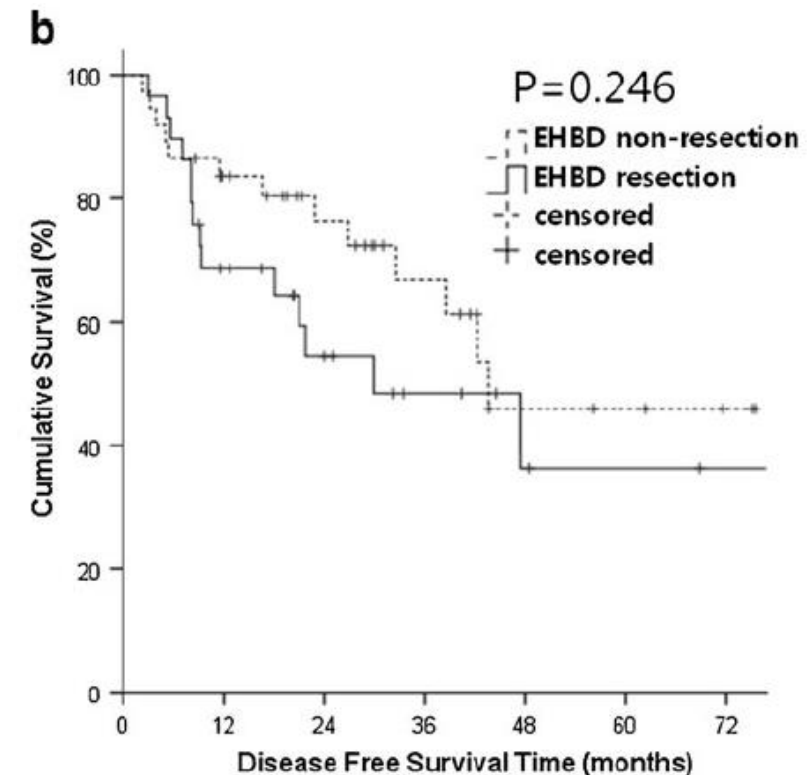
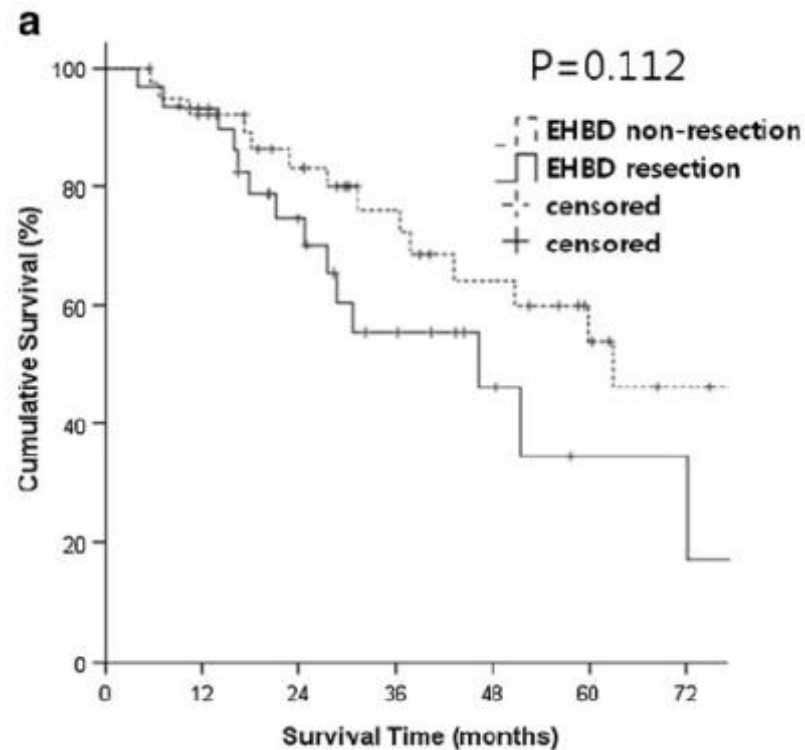
CYSTIC DUCT EVALUATION



ROUTINELY

Surgical strategy for T2 and T3 gallbladder cancer: is extrahepatic bile duct resection always necessary?

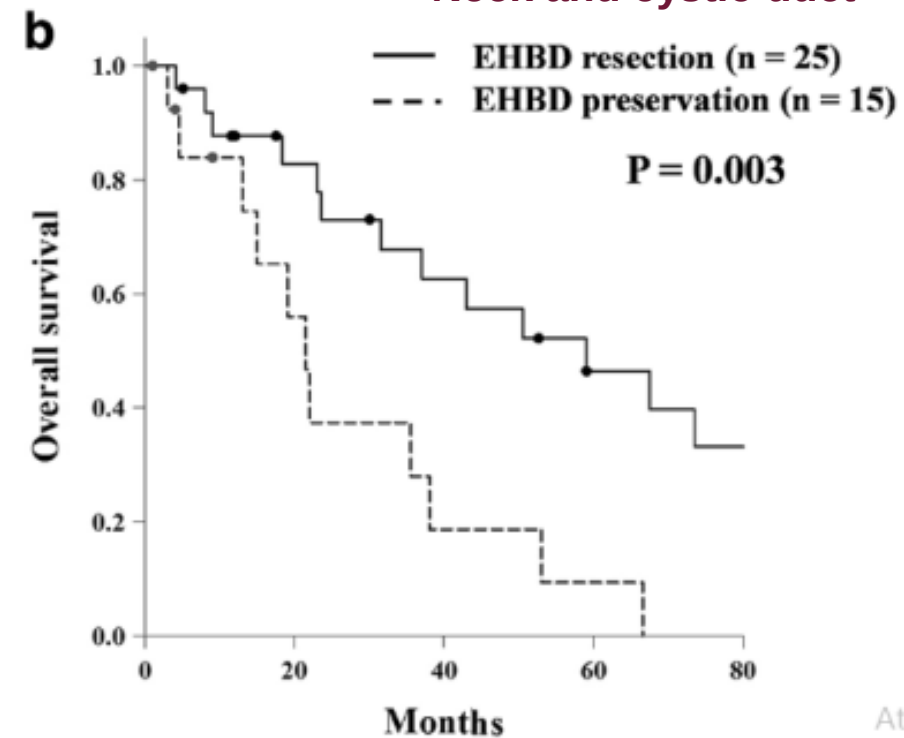
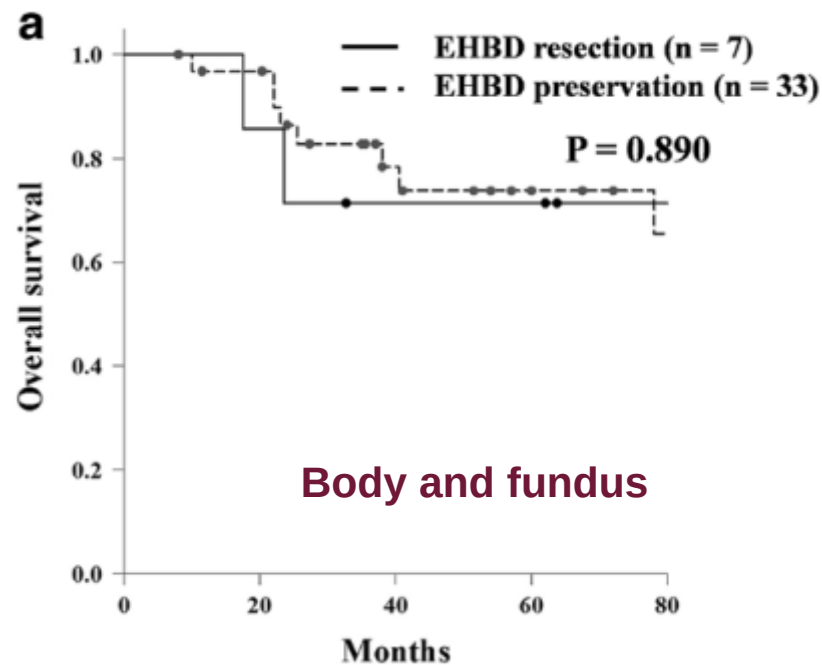
Sae Byeol Choi • Hyung Joon Han • Wan Bae Kim •
Tae Jin Song • Sung Ock Suh • Sang Yong Choi



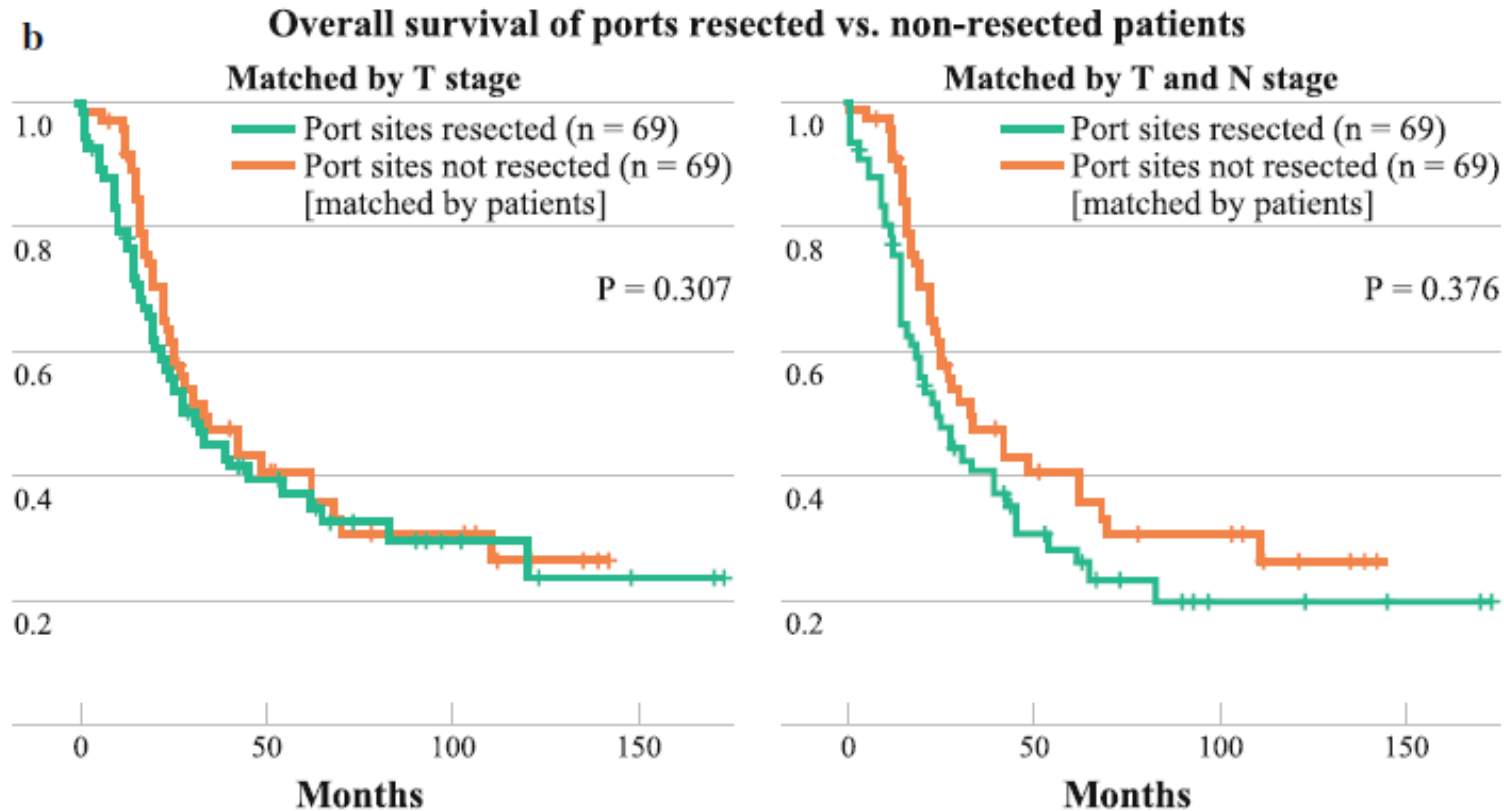
ORIGINAL ARTICLE

Indication of extrahepatic bile duct resection for gallbladder cancer

Hiroshi Kurahara¹  • Kosei Maemura¹ • Yuko Mataka¹ • Masahiko Sakoda¹ • Satoshi Iino¹ • Yota Kawasaki¹ • Shinichiro Mori¹ • Takaaki Arigami¹ • Yuko Kijima¹ • Hiroyuki Shinchi² • Shoji Natsugoe¹



Is Port Site Resection Necessary in the Surgical Management of Gallbladder Cancer?



Received: 12 January 2017 | Revised: 30 January 2017 | Accepted: 1 February 2017

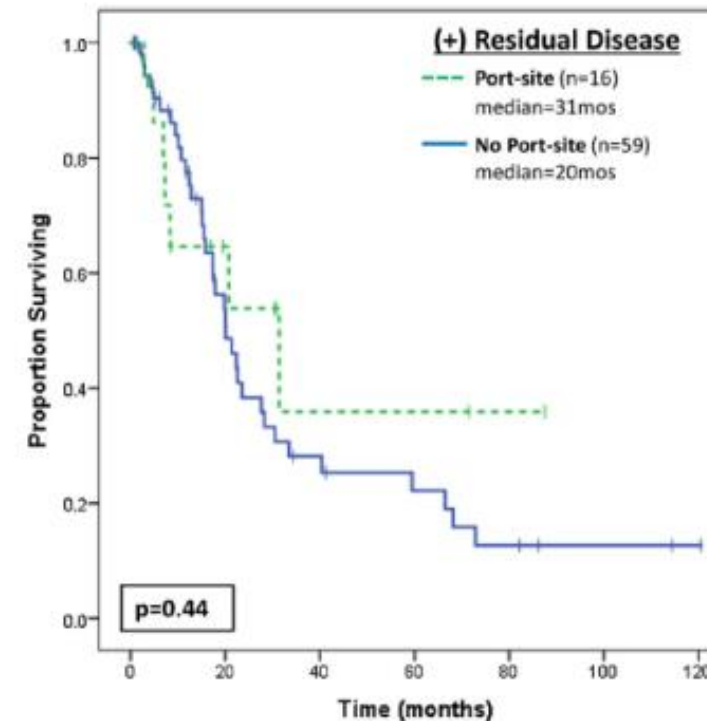
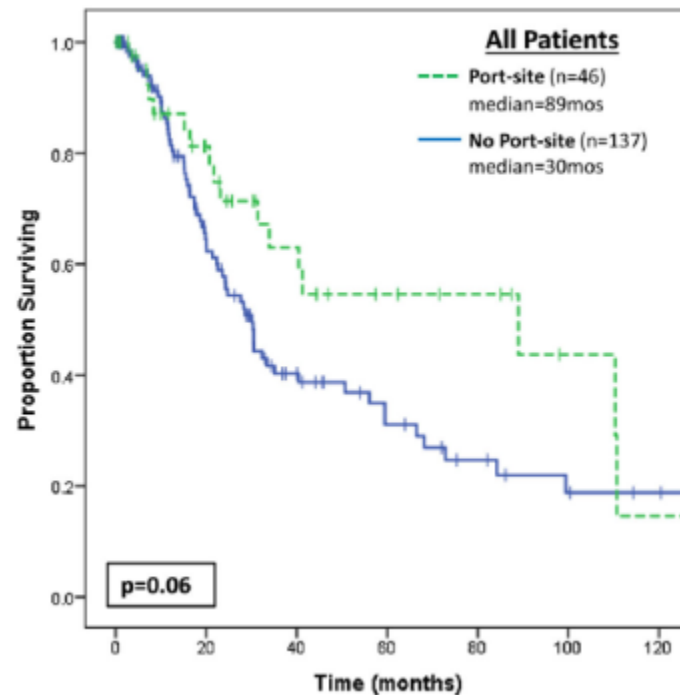
DOI 10.1002/jso.24591

RESEARCH ARTICLE

WILEY

Journal of
SURGICAL ONCOLOGY

Routine port-site excision in incidentally discovered gallbladder cancer is not associated with improved survival: A multi-institution analysis from the US Extrahepatic Biliary Malignancy Consortium



Received: 12 January 2017 | Revised: 30 January 2017 | Accepted: 1 February 2017

DOI 10.1002/jso.24591

RESEARCH ARTICLE

WILEY

Journal of
SURGICAL ONCOLOGY

Routine port-site excision in incidentally discovered gallbladder cancer is not associated with improved survival: A multi-institution analysis from the US Extrahepatic Biliary Malignancy Consortium

- ☐ Port-site excision
 - ☐ Peritoneal disease
 - ☐ No survival benefit
 - ☐ Recurrence similar to no excision
 - ☐ Incisional hernia
 - ☐ Not recommended routinely



ORIGINAL ARTICLE

Minimally invasive versus the conventional open surgical approach of a radical cholecystectomy for gallbladder cancer: a retrospective comparative study

Anil K. Agarwal¹, Amit Javed¹, Raja Kalayarasan¹ & Puja Sakhuja²

¹Department of Gastrointestinal Surgery, and ²Department of Pathology, GB Pant Hospital & MAM College, Delhi University, New Delhi, India

Table 1 Comparison of clinicopathological features of patients who underwent a laparoscopic (Group A) and open (Group B) radical cholecystectomy

Parameter	Group A (n = 24)	Group B (n = 46)	P value
Demography			
Age, median (range)	44 (21–61)	49 (23–70)	0.281
Sex ratio, female: male	2.6:1	3:1	0.848
Operative data			
Duration of surgery in min, median (range)	270 (180–340)	240 (180–360)	0.021
Blood loss in ml, median (range)	200 (100–850)	275 (100–800)	0.034
Post-operative data			
Hospital stay in days, median (range)	5 (3–16)	5 (3–17)	0.111
Morbidity, n (%)	3 (12.5)	8 (17.4)	0.737
Histopathology			
Lymph node yield, median (range) [mean (± SD)]			
Overall	10 (4–31) [12.5 (± 5.4)]	11 (5–26) [12.9 (± 5.4)]	0.642
Primary GBC	12 (6–31) [13.6 (± 4.8)]	12.5 (5–26) [13.9 (± 5.6)]	0.781
IGBC	5 (4–10) [5.5 (± 1.7)]	6 (5–10) [7.4 (± 1.9)]	0.146

Survey Results of the Expert Meeting on Laparoscopic Surgery for Gallbladder Cancer and a Review of Relevant Literature

- ☐ Adequate nodal evaluation (aortocaval)
- ☐ Achieve R0 resection
- ☐ Hepatectomy and biliary reconstruction
- ☐ No difference
- ☐ Highly selected cases

MINIMALLY INVASIVE APPROACH

Gumbs AA, Jarufe N, Gayet B. (2013). Surg Endosc 2013;27:406–414.

Agarwal AK, et al. HPB 2015;17: 536-41

Yoon YS, et al. Dig Surgery 2018

Obrigado!

