



Will intraoperative cholangiography prevent biliary duct injury in laparoscopic cholecystectomy?

Li-Bo Li, Xiu-Jun Cai, Jun-Da Li, Yi-Ping Mu, Yue-Dong Wang, Xiao-Ming Yuan, Xian-Fa Wang, Urs Bryner, Robert K Finley Jr

Li-Bo Li, Xiu-Jun Cai, Jun-Da Li, Yi-Ping Mu, Yue-Dong Wang, Xiao-Ming Yuan, Xian-Fa Wang, Department of General Surgery, Sir Run Run Shaw Hospital, Medical College, Zhejiang University, Qingchun Road East 3, Hangzhou 310016, Zhejiang Province, China

Urs Bryner, Robert K Finley Jr, Department of General Surgery, Medical Center, Loma Linda University, Post Office Box 2000, CA 92354, United States

Author contributions: All authors contributed equally to the work.

Correspondence to: Dr. Li-Bo Li, Department of General Surgery, Sir Run Run Shaw Hospital, Medical College, Zhejiang University, Qingchun Road East 3, Hangzhou 310016, Zhejiang Province, China. lilibo@mail.hz.zj.cn
Telephone: +86-571-6995056

Received: December 22, 1999
Revised: April 6, 2000
Accepted: May 10, 2000
Published online: September 15, 2000

Abstract

AIM: To evaluate the role of intraoperative cholangiogram (IOC) in preventing biliary duct injury during laparoscopic cholecystectomy.

METHODS: Injury location, mechanism, time of detection, treatment outcome, and whether an intraoperative cholangiogram was performed were evaluated in 31 cases of bile duct injuries.

RESULTS: Cholangiograms were done in 22 cases, but they were

misinterpreted in 3 of them. In 12 of 19 misidentified cases, the cholangiogram was interpreted correctly, and the injury detected intraoperatively. Primary laparoscopic repair or open repair and T tube drainage solved the problem. No long-term complications occurred. However, in 3 of the 19 cases the cholangiogram was misinterpreted and in 4 of the 19 cases no cholangiogram was performed. Three of the seven patients required a cholangioenteric anastomosis. In 2 cases the diagnosis was delayed and one of these required a two-stage procedure. Morbidity was increased. Three cases of clip impingement of the common duct had delayed diagnoses, and two of them had injuries. Thermal injury developed in 4 cases who had cholangiograms.

CONCLUSION: Routine IOC plays no role in inducing, preventing, detecting, or minimizing any of the injuries due to clips, lacerations, or electrocautery. IOC does not prevent injuries due to duct misidentification either. Careful interpretation of IOC would prevent injuries and avoid an open operation.

Key words: Cholangiogram; Bile ducts/injuries; Laparoscopy; Cholecystectomy/complications; Intraoperative cholangiogram

© The Author(s) 2000. Published by Baishideng Publishing Group Inc. All rights reserved.

Li LB, Cai XJ, Li JD, Mu YP, Wang YD, Yuan XM, Wang XF, Bryner U, Finley RK Jr. Will intraoperative cholangiography prevent biliary duct injury in laparoscopic cholecystectomy? *World J Gastroenterol* 2000; 6(Suppl 3): 33
Available from: URL: <http://www.wjgnet.com/1007-9327/full/v3/iSuppl3/33.htm>
DOI: <http://dx.doi.org/10.3748/wjg.v3.iSuppl3.33>

E- Editor: Hu S



Published by **Baishideng Publishing Group Inc**

8226 Regency Drive, Pleasanton, CA 94588, USA

Telephone: +1-925-223-8242

Fax: +1-925-223-8243

E-mail: bpgoffice@wjgnet.com

Help Desk: <http://www.wjgnet.com/esps/helpdesk.aspx>

<http://www.wjgnet.com>

