



Does acute cholecystitis represent a contraindication to single-incision laparoscopic cholecystectomy?

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Objectives

Recently, single-incision laparoscopic cholecystectomy (SILC) has been "accused" for potentially increasing the likelihood of iatrogenic biliary tract injury compared with conventional laparoscopic cholecystectomy. The aim of this study was to evaluate relevant data of SILCs performed at our center.

Methods

This was a retrospective study of prospectively recorded data. From 03/2011 to 08/2012 17 consecutive patients (mean age: 59.5 years – mean body mass index: 24.93) underwent SILC by the same surgeon with the use of a flexible laparoscopic port (SILSTM Port, Covidien, Mansfield, MA, USA). Preoperative diagnoses included: symptomatic gallstone disease (n = 11), gallstone pancreatitis (n = 3) and acute cholecystitis (n = 3). Fifteen SILCs were performed electively.

Results

Four SILCs, three of which were elective procedures, had to be converted to conventional laparoscopic (n = 1) or open (n = 3) cholecystectomy. The reason was unsafe operating conditions due to either acute cholecystitis (n = 3) or extensive postoperative adhesions. The mean converted SILC duration was 175 minutes (unconverted: 150 minutes). No postoperative complications were recorded.

Conclusions

SILC is a safe option for cholecystectomy. However, to ensure safety during operations facing acute gallbladder inflammation or extensive adhesions, an increased conversion rate seems inevitable. Therefore, under such conditions, SILC should either not be the preferred cholecystectomy method in the first place or be converted rather early in order to avoid iatrogenic biliary tract injury.