Author's response to reviews

Title: Single-incision laparoscopic cholecystectomy for cholecystolithiasis coinciding with cavernous transformation of the portal vein: Report of a case

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Author's response to reviews: see over
Reviewer's report

Title: Single-incision laparoscopic cholecystectomy for cholecystolithiasis coinciding with cavernous transformation of the portal vein: Report of a case

Version: 1 Date: 5 September 2012

Reviewer: Chang Moo Kang

Reviewer's report:

Authors described very rare case of single incision laparoscopic cholecystectomy for cholecystolithiasis coinciding with cavernous transformation of the portal vein. This case report looks encouraging current approach of single port surgery, following issues should be addressed in revised version of manuscript.

- Long operation time (132min) and blood loss (370) in single incisional laparoscopic cholecystectomy seems not good. When authors had used conventional laparoscopic cholecystectomy, the patients would have experienced much better intraoperative outcome with same postoperative course. Do you think your approach in this specific case could be generally accepted? The potential benefit of single incisional approach seems to be inferior to conventional approach in this specific case, taking technical difficulty and patient’s potential risk during the operation. This issue should be included in discussion session.

As the reviewer indicates, single incision approach might be generally considered to possess the potential benefit of intraoperative procedures. However, a meta-analysis by Markar et al indicates SILS cholecystectomy takes longer but is as safe as conventional approach. Moreover our experiences of SILS cholecystectomy and conventional multiple-port laparoscopic cholecystectomy showed equivalent operative outcome in even cases with acute cholecystitis. To clarify the evidence, we revised the paragraph as follows on page 8:

A meta-analysis indicated that SILS cholecystectomy takes longer but is as safe as multiport conventional laparoscopic cholecystectomy for uncomplicated cholecystectomy. Our experience with 54 SILS cholecystectomy and 157 conventional
multiple-port laparoscopic cholecystectomy (except for converted) cases shows no statistically significant difference in either operative time or blood loss (mean operating time 67.8 min versus 67.1 min, p=0.897 and mean blood loss 6.8g versus 26g, p=0.103). Furthermore, we have performed SILS in 17 cases and multiple-port laparoscopic cholecystectomy in 18 cases with acute cholecystitis, and the two groups had similar operating times and blood losses (mean operating time 95.8 min versus 81.4 min, p=0.285 and mean blood loss 37g versus 56g, p=0.546).

It may be true that SILS had more risk of bleeding in this specific case. However, we might experience unexpected bleeding even if we a performed conventional approach. The sentence “SILS cholecystectomy can be performed safely” might be misleading. So we revised the sentence as follows:

We believe that laparoscopic cholecystectomy for young women is feasible and that sudden bleeding in this case might have been overcome even if we had performed conventional multiport laparoscopy. A lesson learned from this case is that surgeons performing biliary operations in cases with CTPV might encounter unexpected bleeding. We must be prepared to control intraoperative bleeding regardless of operative procedures.

- According to current case report, this approach may be very difficult and dangerous when applying single incision surgery. What would be potential indications or contraindications for single incision lap chole in case of CTPV? # please include in discussion session

Cavernous transformation of the portal vein is a challenge for surgeons regardless of operative procedures. It is difficult to define an indication for SILS. Our opinion is that SILS should be an option in facilities with good operative outcome and the patient safety has the highest priority. We declared this in the last paragraph of “Discussion” as conclusion.

SILS cholecystectomy might be an option in highly experienced facilities, but we must always keep in mind that patient safety has the highest priority.
Reviewer's report

Title: Single-incision laparoscopic cholecystectomy for cholecystolithiasis coinciding with cavernous transformation of the portal vein: Report of a case

Version: 1 Date: 11 October 2012

Reviewer: Gregory Kouraklis

Reviewer's report:


Summary:
The authors report a case of a 44-year old woman who underwent a successful single incision laparoscopic cholecystectomy with co-existing cavernous transformation of the portal vein (CTPV). CTPV is a rare vascular deformity due to extra-hepatic portal vein occlusion with formation of dilatated collateral vessels around the liver hilus. The patient developed symptomatic cholelithiasis without symptoms and signs of inflammation of the gallbladder. The authors performed successfully a SILS cholecystectomy and the patient was discharged on postoperative day 2 having an uneventful postoperative course.

Points of criticism:
1. Cavernous transformation of the portal vein is not a contra-indication for performing SILS. Furthermore several operating procedures such as splenectomy etc have been performed with the SILS technique as published in the pertinent literature.

   We clarified the evidence that SILS cholecystectomy is technically feasible by revising the paragraph as follows on page 8:

   A meta-analysis4 indicated that SILS cholecystectomy takes longer but is as safe as multiport conventional laparoscopic cholecystectomy for uncomplicated cholecystectomy. Our experience with 54 SILS cholecystectomy and 157 conventional
multiple-port laparoscopic cholecystectomy (except for converted) cases shows no statistically significant difference in either operative time or blood loss (mean operating time 67.8 min versus 67.1 min, p=0.897 and mean blood loss 6.8g versus 26g, p=0.103). Furthermore, we have performed SILS in 17 cases and multiple-port laparoscopic cholecystectomy in 18 cases with acute cholecystitis, and the two groups had similar operating times and blood losses (mean operating time 95.8 min versus 81.4 min, p=0.285 and mean blood loss 37g versus 56g, p=0.546).

2. The authors performed for a symptomatic cholelithiasis a CT scan as well as an MRI without explaining in their manuscript the reason for these extended pre-operative radiological examinations.

   We perform a preoperative CT scan as a routine, so the sentence was revised as follows:

   Routine preoperative computed tomography (CT) revealed a series of tortuous collateral veins at the liver hilum, irregularly surrounding the gallbladder from the neck to the fundus (Fig 1a, 1b).

   We also showed the purpose of an MRI in the following sentence.

   To check the anatomy of the biliary tract, we performed magnetic resonance imaging, which confirmed discontinuity of the common bile duct.

3. The manuscript needs linguistic improvement.

   This paper was edited by a native speaker of English, with experience in medical and scientific proofreading.

Conclusion:
The authors describe in their manuscript a case of a single incision laparoscopic cholecystectomy with co-existence of cavernous transformation of the portal vein. Due to the above mentioned points of criticism we do not think that the manuscript should be considered for publication in your journal.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Needs some language corrections before being
published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
'I declare that I have no competing interests'