Towards the 2nd International Consensus Conference on Laparoscopic Liver Resection

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Six years have passed since the 1st International Consensus Conference on Laparoscopic Liver Resection was held. This comparatively new surgical technique has evolved during this time and is rapidly being adopted worldwide (Fig. 1). To clarify the answers to the questions of how the value, safety, and quality of this procedure compare with those of open hepatectomy at this point in preparation for the 2nd International Consensus Conference on Laparoscopic Liver Resection, we have investigated the following four points in this special issue in advance of the conference:

1. Theoretical superiority of laparoscopic hepatectomy with search of the literature to look for the best available evidence;
2. Survey of the extent of adoption of laparoscopic hepatectomy worldwide;
3. Concentration of major hepatectomy in institutions that handle large numbers of cases; and
4. Evaluation of the difficulty of laparoscopic hepatectomy.

In my opinion, laparoscopic liver resection is superior to the open approach because the laparoscope allows better exposure with a magnified view, and the pneumoperitoneal pressure reduces hepatic vein bleeding from the cut surface. The concept for liver resection has changed from the open ventral approach to the laparoscopic caudal approach (Fig. 2). This is the reason that I began laparoscopic living

Fig. 1 Geographic distribution of the respondents [1]

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as donor hepatectomy. As Krummel proposed, an operation consists of imaging and manipulation. Laparoscopic surgery has its merits and demerits; the former is better exposure with magnified view while the latter is restriction of manipulation. If you overcome the restriction of manipulation, you can enjoy better exposure with a magnified view. Restriction of manipulation has little effect with the help of energy devices, but better exposure with a magnified view allows clearer access to the liver, which sits behind the rib cage.

During this conference, we should extensively discuss how to improve the quality of laparoscopic liver resection. Improving quality also includes how to select the appropriate patients for the surgeon’s skills. We will propose a scoring system to define the range of difficulty of laparoscopic liver resection, similar to the Child–Pugh score, so that the beginner can start laparoscopic liver resection easily and safely (Fig. 3). The scoring system incorporates factors such as tumor extent, size, number, location, normal liver, cirrhotic liver, pure, hybrid, HALS and robot.

The central questions to be answered at the conference are as follows:

1. What are the comparative short-term and long-term outcomes of laparoscopic liver resection vs open liver resection?
2. What are the indications according to the difficulty of laparoscopic liver resection?
3. What are the essentials for improving the quality of laparoscopic liver resection?

Over 40 experts from around the world will gather in Morioka, Iwate Prefecture on 4–6 October 2014 for the 2nd International Consensus Conference on Laparoscopic Liver Resection. For this article, we verified the theoretical superiority of laparoscopic hepatectomy and searched the literature to look for the best available evidence, with the aim of enabling meaningful debate at this conference. Data from a survey of the extent of adoption of laparoscopic hepatectomy worldwide, on an evaluation of the difficulty of laparoscopic hepatectomy, and concerning the concentration of major hepatectomy in institutions that handle large numbers of cases will similarly be presented in three other articles in the same issue in preparation for the conference.

**Conflict of interest** None declared.

**References**