

---

## Preface

Since the first laparoscopic cholecystectomy was performed in 1987, almost 30 years have elapsed. Although laparoscopic technique had been gradually applied in almost every area of surgery, laparoscopic liver resection (LLR) underwent a slow development all over the world since the first case was performed in 1991, especially in the first decade, mainly due to sophisticated anatomy, risk of bleeding, lack of ideal instrument, and concern for adequate margins in resection of malignant tumors. As a result, there were only a few cases of LLR performed, most of which were resections of solid tumor limited in the left lateral section or the margins and cystic fenestration, and the feasibility and efficiency of LLR had been questioned.

We have been performing LLR since 2001 and reported the first case of laparoscopic hemihepatectomy, laparoscopic right trisegmentectomy, laparoscopic modeling left lateral sectionectomy, single-incision laparoscopic liver resection, and retroperitoneal laparoscopic liver resection in China and all over the world. Based on those experiences, we established our unique technique and theory system of anatomic laparoscopic liver resection, which is characterized by precontrol of the blood supply of the to-be-resected area and prevention of bleeding, and have performed over 1000 cases of laparoscopic liver resection to date.

Benefiting from technique development and experience accumulation, in the recent 10 years, the application of minimally invasive technique in hepato-pancreato-biliary surgery had underwent rapid development, and LLR has been generally accepted after the Louisville Statement was announced in 2008. According to the literature, more than 3000 cases of LLR have been reported worldwide by 2014, and 50% of them were applied for malignant lesions. Not only the number of LLRs but also the ratio of major liver resections increased, and LLR for lesions in every segment was reported. The location of lesions was no longer considered as a contradiction for LLR anymore, and it was generally accepted that minimally invasive surgery has advantages such as smaller local trauma, milder systemic reactions, less operative blood loss, shorter hospital stay, lower morbidity, and better cosmetic results.

Despite all the achievements above, minimally invasive surgery is still not the majority of operations in hepato-pancreato-biliary surgery until now, not only in China but all over the world, and the technique varies from center to center, leading to difficulty in popularization. Thus, based on the experience of our LLR cases and the modeling or stylized surgery idea, we wrote this book, with plenty of pictures

that demonstrate the operative and technical details presented, hopefully, to serve as reference and thus facilitate other centers to perform minimally invasive surgery.

As the first English book of our team, we do know that there are still some limitations of this book, and we are more than glad to receive judgments from peers all over the world, to make this book better and benefit more patients. Also, we will publish books focusing on laparoscopic pancreatectomy and robotic hepato-pancreato-biliary surgery, which will overcome the known difficulties during writing this book and hopefully be better.

On behalf of all the surgeons in our team, I would like to express my sincere acknowledgment to Academician Wu Mengchao and Academician Huang Zhiqiang, who are my mentors and had been supporting and guiding our team to perform minimally invasive surgery. We also would like to thank all the colleagues from the Department of Anesthesiology, Department of Nursing, Department of Intensive Care Unit, Department of Radiology, and so on, who helped us a lot to perform the surgeries. And thanks to all the patients, for trusting us and for being supportive to our writings.

Beijing, China

Rong Liu

Laparoscopic Liver Resection

Theory and Techniques

Liu, R.

2017, X, 107 p. 16 illus., 7 illus. in color., Hardcover

ISBN: 978-94-017-9734-4