



Laparoscopic liver resection for colorectal liver metastases: perspectives from patients

Edward Willems^{1,2}, Mathieu D'Hondt¹

¹Department of Digestive and Hepatobiliary/Pancreatic Surgery, Groeninge Hospital, Kortrijk, Belgium; ²Department of Surgery, Maastricht University Medical Centre, Maastricht, The Netherlands

Correspondence to: Mathieu D'Hondt. Department of Digestive and Hepatobiliary/Pancreatic Surgery, Groeninge Hospital, President Kennedylaan 4, 8500 Kortrijk, Belgium. Email: mathieudhondt2000@yahoo.com.

Comment on: Bøe C, Bondevik H, Wahl AK, *et al.* Going through laparoscopic liver resection in patients with colorectal liver metastases-A qualitative study. *Nurs Open* 2018;6:260-7.

Received: 08 July 2019; Accepted: 24 July 2019; Published: 08 August 2019.

doi: 10.21037/ls.2019.07.09

View this article at: <http://dx.doi.org/10.21037/ls.2019.07.09>

The study performed by Bøe and colleagues describes the experiences of patients undergoing laparoscopic liver resection (LLR) for colorectal liver metastases (CRLM) through semi-structured interviews (1). In the past decade, LLR has become the gold standard for minor liver resections and has been adopted widely for major liver resections in many expert centres (2-5). Many safety and feasibility studies have been performed (6-11). Little is known however, about the patient perspectives. Following thorough analysis of the interviews of nine patients undergoing LLR for CRLM, the authors found three important themes: (I) a rapid recovery with minor pain, (II) uncertainty of a new technique for cancer treatment and (III) unmet informational needs.

Enhanced recovery after surgery (ERAS) is designed to reduce postoperative morbidity and to shorten hospital stay (12). ERAS was introduced over 20 years, yet implementation into the field of liver surgery occurred only in the last few years (13-15). ERAS principles aim to reduce surgical stress response by promoting early mobilisation and oral feeding and reducing postoperative pain. Reduction of postoperative pain is reached while also restricting the use of opioids. Several authors have shown a significant decrease in hospital stay after liver surgery following the implementation of clinical pathways based on ERAS principles (14,15). Furthermore, since the implementation of minimally invasive surgery for liver resection, several authors have shown a decrease in postoperative pain compared to open liver resection (OLR) (6-11). From the

interviews, the authors found that postoperative pain was not an important problem (1).

Since the implementation of LLR, critics have always mentioned the concerns for oncological safety. This is seen as an important reason for the slow global uptake of LLR. The first LLR was described by Gagner and colleagues in 1992 (16). In the early 2000's, several early adopters started publishing their results, demonstrating the safety and feasibility of LLR (6-11). Consensus meetings facilitated the implementation of a minimally invasive approach in liver surgery (2,17). In the last few years, the benefits of laparoscopy have been shown repeatedly: less pain, reduced blood loss, lower complication rates and shorter hospital stay (2-11). Furthermore, LLR does not have any oncological disadvantage compared to OLR (9,18-20). R0 resections rates are similar in both open and laparoscopic groups with comparable long-term results. Several randomised controlled trials are still ongoing to confirm these data. Recently, the Oslo-Comet trial, a randomised controlled trial on laparoscopic versus open resection for CRLM, showed no oncological disadvantage for laparoscopic compared to OLR for CRLM (21).

The authors found that several patients were disappointed or dissatisfied regarding the lack of information during hospitalization and after discharge. Patients stated they were not adequately informed not only about the disease and operative results and findings, but also about the practical organisation following surgery. Furthermore, patients experienced uncertainty regarding the regimen

after discharge due to this lack of information (1). In the last decade, shared decision-making made its entry into the field of surgery. This creates an environment of open communication and extensive information about treatment options and leaves the patients with less uncertainty regarding the operation (22). Patients in the study by Bøe and colleagues did not experience lack of information about the surgery. However, with the implementation of new surgical techniques and enhanced recovery pathways, many new questions arise. The dissatisfaction of patients due to lack of information highlights the importance of extensive oral and written information preoperatively. This can be supplemented by early outpatient clinic visits or telephone calls by the surgeon or a dedicated member of the team to answer to any unanswered question (15,23-25). Using several methods of information pre- and post-operatively, authors found very high patient satisfaction rates, even in ambulatory LLR (15,23-25).

For this study, Bøe and colleagues interviewed only nine patients representing a broad variation in demographic characteristics. They state that these nine participants provided for relevant new knowledge and deeper insight, although more participants might provide more nuances and variations. Although this is the first report of its kind in the field of LLR, interviewing more patients would probably lead to more relevant information. Furthermore, one very positive or negative experience, could significantly influence overall results in a study group of only nine patients.

Several recommendations for practice are made in the study. Firstly, the fact that LLR is an attractive alternative to OLR due to minor pain and rapid recovery. Secondly, the importance of adequate information during the entire process. Lastly, all patients included in this study live with metastatic cancer which on its own is an important distress. Adequate information about the disease from an oncological perspective should also be provided.

However, at the timing of surgery for the patients in the study by Bøe and colleagues in 2011, implementation of LLR and of ERAS principles in liver surgery, were still very uncommon, and data supporting the benefits of laparoscopy were very scarce. This could account for the uncertainty regarding oncological safety and for the dissatisfaction with lack of information postoperatively. Since 2011, LLR has made a big leap forward with plenty evidence supporting the safety, feasibility and benefits of the laparoscopic approach. On the other hand, the importance of detailed patient information has been acknowledged widely and

shared decision-making is becoming more important. Therefore, the results and conclusions of this study might not be very relevant in 2019.

The study by Bøe and colleagues is the first of its kind, studying the patient's perspectives following LLR based on interviews. Evidence proving safety of LLR is widely available, yet little attention is given to patient satisfaction and individual patient experiences following the implementation of new techniques and enhanced recovery programs. However, the study sample size is relatively small and conclusions might not be very relevant. Researchers should be encouraged to repeat similar studies in the era of laparoscopic liver surgery.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Laparoscopic Surgery*. The article did not undergo external peer review.

Conflicts of Interest: Both authors have completed the ICMJE uniform disclosure form (available at <http://dx.doi.org/10.21037/ls.2019.07.09>). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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doi: 10.21037/ls.2019.07.09

Cite this article as: Willems E, D'Hondt M. Laparoscopic liver resection for colorectal liver metastases: perspectives from patients. *Laparosc Surg* 2019;3:32.