Abstract

Laparoscopic liver resection is a technique that has boomed over time. Published related reports have increased exponentially in the last decade, leading to comparative studies and meta-analysis. Three types of technical approaches have been identified: pure laparoscopic, hand-assisted and hybrids procedures. While no precise indications exist for each method, the choice of each will depend on the type of surgical procedure and the surgeon’s experience. Primarily only benign lesions were accepted for a laparoscopic intervention. Today malignant lesions, including metastases, are being resected via minimally invasive approach. Case selection may benefit in successful operative outcomes. Ideally, single lesions, less than 5 cm, peripheral and located at lateral or peripheral segments (II-VI) are better suited for laparoscopic liver resection. In addition, these procedures will be likely to succeed under expert experienced laparoscopic liver surgeons that have the best available technology within their reach. Reported results support the use of this technique when compared with open surgery in regards to minor: blood loss, use of opioids, time to oral intake, length of stay and complications. Furthermore, total costs are at least similar to the open approach. Most importantly, results from 5-year follow up studies of patients with malignant disease, in terms of disease-free survival and overall survival were equivalent to open surgery.

Keywords

Liver resection, laparoscopy.