Can Laparoscopic Surgery Be Applied to Gallbladder Cancer (≥T2)? : Cons

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According to the NCCN Guideline 2009 ad ESMO Guideline 2011, radical resection is highly recommended for GB cancer patients with T1b or greater. So the question today to solve is laparoscopic surgery can be applied for radical cholecystectomy. Radical cholecystectomy, which was invented and reported in 1954 by Glen and Hays, is composed of liver resection (combined with GB) and lymph node dissection. Various types of liver resection can be applied according to the depth of invasion, tumor location, and gross type of tumor, among which are wedge resection with 2cm margin, anatomic segment IV+V resection, extended right hepatectomy or trisectionectomy. Recently the incidence of laparoscopic liver resections is increasing and can be applied to difficult cases by few surgeons. However still, to guarantee the more resection margin or to do anatomic IVB+V resection seems much more difficult with laparoscopy even though possible.

Extent of LN dissection for GB is not still defined and varied among institutes. For limited extent of LN dissection, LN group 12 should be included. Some institutes do extended of LN dissection including LN goups 13a, 8, 9, 14, 16. For LN dissection of GB cancer, there is no study comparing the feasibility of laparoscopic LN dissection with open LN dissection for GB cancer. However to do systemic LN dissection including #13, 12, 8 seems still more difficult and dangerous with laparoscopy even though possible.

Port site metastasis has been a big concern for laparoscopic surgery. Port site metastasis is reported in the range of 6.1% and 17%. The major causes of port site metastasis are traumatic clamping GB wall and bile spillage. The risk of open wound metastasis is between 3.5% and 6.5%.

So the risk of port-site metastasis is still higher than open wound metastasis.

There is no report about the survival between laparoscopic and open GB cancer surgery. Recently improved survival has been reported including the reports from National Cancer Center, Korea.

The big advantage of laparoscopic surgery is a small wound and consequent less wound pain, early recovery and improved quality of life. Laparoscopic surgery has a big advantage of less wound/pain however technical feasibility of liver resection and LN dissection are not fully established. We should be so careful not to render a potentially curative situation incurable through operative error of inadequate tumor clearance.

Reference

1. Horiguchi A et al. Ga Gallbladder bed resection or hepatectomy of segments 4a and 5 for pT2 gallbladder carcinoma: analysis of Japanese registration cases by the study group for biliary surgery of the Japanese

Society of Hepato-Biliary-Pancreatic Surgery. J HBP Sci 2013
2. Aretaabala X et al. Gallbladder cancer: role of laparoscopy in the management of potentially resectable tumor. Surg Endosc 2010:24;2192-2196
3. Shih SP et al. Gallbladder Cancer : the role of laparoscopy and radical resection. Ann Surg 2007:245:893-901