Feasibility and practical tips of laparoscopic extended cholecystectomy

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Lecture : Aim. To evaluate the technical feasibility and technical tip of laparoscopic radical cholecystectomy (LRC) for primary or
incidental early gallbladder cancer (GBC) treatment.

Methods. Articles reporting LRC for GBC were reviewed from the first case reported in 2010 to 2015 (129 patients). 116 patients had a preoperative diagnosis of gallbladder cancer (primary GBC). 13 patients were incidental cases (IGBC) discovered during or after a laparoscopic cholecystectomy. In view of technical tip of LRC, Hilar dissection during laparoscopic right hepatectomy (LRH) is usually approached through an anterior approach, mimicking and with similar view than in open surgery. However, safe and complete isolation of the individual hilar structures is sometimes more difficult in laparoscopic surgery because the posterior structures are embedded in liver and might be difficult to expose. In the present video we demonstrate a lateral approach (LA) to the hilum of the liver. This approach appears to facilitate the visualization, exposure and dissection of the hilar structures. So this is applied to perform LRC during LN dissection.

Results. The majority of patients who underwent LRC were pT2 (62.7% GBC and 63.6% IGBC). Parenchyma-sparing operation with wedge resection of the gallbladder bed or resection of segments IVb-V were performed principally. Laparoscopic lymphadenectomy was carried out according to the reported depth of neoplasm invasion. Lymph node retrieved ranged from 3 to 21. Some authors performed routine sampling biopsy of the inter-aorto-caval lymph nodes (16b1 station) before the radical treatment. No postoperative mortality was documented. Discharge mean day was POD 5th. 16 patients had post operative morbidities. Bile leakage was the most frequent post-operative complication. 5 y-survival rate ranged from 68.75 to 90.7 months. LA-LRC is performed successful using lateral laparoscopic approach. None of 6 patients undergoing LA-LRC required conversion to another view during hilar dissection. The right portal vein and artery isolation and LN 12, 13 could be reached expeditiously and safely prior to parenchymal transaction .

Conclusion. Laparoscopy can not be considered as a dogmatic contraindication to GBC but a primary approach for early case (pT1b and pT2) treatment. LA-LRC is performed successful using lateral laparoscopic approach. The lateral approach to the hilum appears to facilitate the identification, dissection of the right sided vascular structures and may decrease the risk of injury to the left sided branches.