

Laparoscopic versus Open Approach in Gallbladder Cancer Treatment - 9-Year Experience in Fundeni Clinical Institute

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Abstract

Introduction: Gallbladder cancer is the most common biliary malignancy frequently diagnosed incidentally on cholecystectomy specimens for presumed benign disease. Once the diagnosis is confirmed on histopathologically, the treatment must be completed by resecting the gallbladder liver bed and regional lymph nodes. The laparoscopic approach seems to be efficient and oncologically safe. The aim of our study was to present the 9-year experience in treating gallbladder cancer in our surgery clinic by both open and laparoscopic approach completed by a literature review with the latest updates regarding the state of the laparoscopic approach in treating this type of cancer.

Materials and Methods: Fifty-seven patients underwent radical surgery and 26 resections had a palliative purpose. Among radical resections, 52 were performed by using the open approach and 5 by using the laparoscopic approach. 14 cases out of 57 were completion procedures performed after a malignant histopathological finding was confirmed on a simple cholecystectomy specimen. In the majority of cases, the primary simple cholecystectomy was performed by laparoscopic approach. The laparoscopic approach was used in 3 cases of re-resection and 2 per-primam resections.

Results: The median age of the patients was 64.21 years in the open group and 67.2 years in the laparoscopic group. Most patients were females. All patients had one or more comorbidities with an ASA score of 3 or 4 in 52 patients out of 57. ASA score had lower values in the laparoscopic group. The average surgery time for the laparoscopic group was 308 minutes, similar to the one for the open group that was 294 minutes. The complication rate was higher in the open group. The number of harvested lymph nodes was similar between the groups. The laparoscopic group benefited of lower postoperative pain, faster recovery and shorter hospital stay (6.2 days versus 13 days). Gallbladder cancer evolves asymptomatic in early stages and the diagnosis in advanced stages limits the therapeutic options. Still, in cases incidentally diagnosed on cholecystectomy specimens for presumed benign disease (stages T1-T3), the re-resection might be performed by laparoscopic approach. Also, in per-primam diagnosed selected cases, the laparoscopic resection might be performed by experimented teams.

Conclusions: The laparoscopic approach is an ideal alternative to the open approach in treating early-stage gallbladder cancer. This surgical approach provides oncological safety, similar R0 resection rates and number of harvested lymph-nodes. The maximum benefit of this surgical approach is achieved in high-volume centers with experimented teams.

Keywords: gallbladder cancer, laparoscopy, open surgery