

COMPARABLE ONCOLOGIC OUTCOME OF RADICAL CHOLECYSTECTOMY FOR T2 GALLBLADDER CANCER BETWEEN LAPAROSCOPIC AND OPEN PROCEDURES : MULTICENTER RETROSPECTIVE STUDY

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Background : The present study aimed to compare the oncologic outcome between laparoscopic radical cholecystectomy (LRC) and open radical cholecystectomy (ORC) in T2 gallbladder cancer(T2GBC) patients.

Methods : We retrospectively reviewed 526 patients who underwent radical cholecystectomy for with curative intent for T2GBC at five tertiary centers from January 2000 to December 2020. Comparison between laparoscopic radical cholecystectomy (LRC) and open radical cholecystectomy (ORC) groups was performed after matching using inverse probability of treatment weighting and propensity score matching, based on age, gender, ASA score, BMI, CA19-9, and adjuvant treatment.

Results : After matching, LRC showed longer operative times compared to the ORC (211 vs. 182 minutes, $p=0.001$). Between two group, T-stage distribution had significant differences ($p=0.03$), with LRC showing T2a/T2b rates of 39.9%/60.0% compared to 49.1%/50.8% in ORC. There were no significant differences in the number of positive lymph nodes or N-stage between the groups ($p=0.1214$ and $p=0.6985$, respectively). Postoperative complications were significantly higher in the ORC group (71%) compared to the LRC group (38.9%) ($p<0.001$). In univariate and multivariate analyses, N-stage and R0 resection were independent risk factors, while the operation method was not identified as a significant factor. The overall survival (OS) and disease-free survival (DFS) were comparable between both groups, even when stratified by T-stage (OS: $p=0.6989$, DFS: $p=0.7439$).

Conclusions : LRC could be a feasible operation method for T2 GBC without oncologic compromise in experienced hands.