Topic : **Biliary & Pancreas**

PROGNOSIS ASSOCIATED WITH PATHOLOGICAL RESPONSE IN RESECTED LOCALLY ADVANCED GALLBLADDER CANCER FOLLOWING PREOPERATIVE CHEMOTHERAPY

Kaival GUNDAVDA [1], Shraddha PATKAR [1], Mahesh GOEL [1]

[1] *Division of Hepatobiliary-Pancreatic Surgery, Department of Surgical Oncology, Tata Memorial Hospital, Homi Bhabha National Institute, India*

Background : Neoadjuvant chemotherapy (NACT) is increasingly used in patients with locally advanced gallbladder cancer (LAGBC), allowing pathological complete response (pCR) in a small subset of patients. We investigate the factors predicting pCR after NACT and the impact of pathological response on survival in patients with LAGBC.

Methods : This observational cohort study assessed all consecutive patients with LAGBC who underwent curative resection following NACT, from January 2015 to December 2022. We analysed the incidence of pCR (defined as the absence of vital tumour cells in the gallbladder and sampled nodes), factors associated with pathological response, and its association with survival. The median follow-up was 42 months.

Results : Of 308 patients of LAGBC who underwent NACT, clinical benefit was seen in 75%. Of these, on pathology review in 83 patients who underwent curative resection, pCR was seen in 11 patients (13.25%). While patients experiencing pCR had the best survival, whereas pathological responders (Mandard grades 1 and 2) had better Overall Survival (OS) (median not reached) as compared to 29 months for poor responders (Mandard 3, 4 and 5) (p 0.04). Responders had a disease-free survival (DFS) of 31 months versus 9.2 months for patients without pathologic response (p 0.05). Neither the preoperative multiagent chemotherapy nor the number of cycles were associated with pathological response.

Conclusions : PCR was achieved in 13.25% of patients following NACT in LAGBC. Though pCR patients fared best, a graded pathological response was associated with improved OS and DFS. Factors predicting pCR have implications for treatment strategies requiring study in larger prospective studies.

Corresponding Author : **Kaival GUNDAVDA** (gundavdakaival@gmail.com)