Concurrent chemoradiation in Carcinoma Gall Bladder

Gallbladder cancer is a relatively uncommon cancer with peculiar geographical distribution, being common in Central and South America, Central and Eastern Europe, Japan and Northern India. The incidence of gall bladder cancer is alarmingly increasing in China as well as north central India.

When diagnosed early, surgical options include: Simple Cholecystectomy, radical or extended cholecystectomy—involving removal of gallbladder plus at least 2 cm of the gallbladder bed, and dissection of lymph nodes from the hepatoduodenal ligament behind the second part of duodenum, head of pancreas, and the coeliac axis; radical cholecystectomy with liver (segmental or lobar) resection; radical cholecystectomy with extensive lymph-node (paraaortic) dissection; radical cholecystectomy with resection of bile duct or pancreaticoduodenectomy; and, any of the above surgical options in addition to resection of port sites in patients who were initially treated by laparoscopic cholecystectomy.

Most often and especially in India Ca.GB is diagnosed after symptoms such as abdominal pain, jaundice and vomiting occur, and it has spread to other organs such as the liver. These patients are eligible only for palliation (surgical/non-surgical, chemotherapy or radiotherapy). Amongst those eligible for surgery most patients develop recurrences, either local or distant or both. Various institutions have reported 5-year survival rates in the range of 30-35% after surgery alone.

This scenario has prompted many investigators to venture into adjuvant treatment of Ca. GB in the post operative setting. Options explored include chemotherapy, radiotherapy and concomitant chemoradiation. Chemotherapy as well as radiotherapy in this setting has shown benefit in disease free survival however which patients are appropriate for radiation and which subset of patients should be subjected to chemotherapy upfront is controversial including sequencing of chemotherapy and radiotherapy.

Concurrent chemoradiation in the post – operative setting has been plagued with controversy. Encouragingly many studies, both prospective and retrospective have shown almost doubling of the 5-year survival rate in the range of 60-65% with the use of post – operative chemoradiation with infusional 5 - FU. Patients with stage II, III, or locally recurrent cancers showed improved survival. Increasing T stage and N stage have been shown to be independent poor prognostic markers. Extent of resection (R0 v/s R1) was the most important variable in all the series. These results have been achieved with manageable toxicities. The downside of the published data has been that most studies were single institution trials with small sample size. India with the huge burden of the disease can look to design better multicenter trials which can yield interesting data foe the formulation of Indian guidelines for the management

More aggressive measures using current cancer therapies and integration of new cancer treatment modalities will be required to favorably impact on the poor prognosis of patients with Stage IV or subtotally resected Ca. GB. Additional investigation leading to earlier diagnosis is warranted, because most patients with Ca. GB present with advanced disease.