Is a shift in the standard of care chemotherapy for patients with esophageal cancer premature?

Melody Xuan Lu Qu, Lisa Tremblay, Aamer Mahmud

Corresponding author: Melody Xuan Lu Qu

1. Radiation Oncology, Cancer Centre of Southeastern Ontario 2. Oncology, Kingston General Hospital and Hotel Dieu Hospital, Queens University 3. Oncology, Kingston General Hospital and Hotel Dieu Hospital, Queens University

Categories: Oncology, Radiation Oncology
Keywords: esophageal cancer, gastro-esophageal junction cancer, definitive chemo-radiation, chemotherapy, carboplatin/paclitaxel, cisplatin/5-FU, survival, outcome

How to cite this poster

Abstract

Purpose: To compare outcomes among patients with localized esophageal and gastro-esophageal junction (GEJ) cancer who received concomitant chemo-radiation (CRT) using either cisplatin/5-FU or carboplatin/paclitaxel. CROSS trial demonstrated efficacy of carboplatin/paclitaxel in tri-modality setting. However this regimen has also been adopted as an alternate for patients receiving CRT as definitive treatment due to better tolerance.

Materials and Methods: Medical records of all patients diagnosed with localized carcinoma of esophagus and GEJ who underwent definitive CRT using cisplatin/5-FU, carboplatin/5-FU, or carboplatin/paclitaxel between January 2008 and March 2015 at our academic centre were reviewed.

Results: Seventy-five patients (79% male) were identified with a median age of 74 years (range 45-86). Most (66%) had an adenocarcinoma and 37% squamous cell carcinoma. 63% had distal 1/3rd and/or GEJ tumour. 48% received cisplatin/5-FU, 35% carboplatin/paclitaxel and 17% carboplatin/5-FU. Most patients (99%) received 50 Gy in 25 fractions. The median overall survival (OS) for cisplatin/5-FU group was 27 months (m) (95%CI 17-39) with 3-year OS of 42%, in contrast to 14 m (95%CI 11-17) and 13% among patients received carboplatin/paclitaxel (log-rank p=0.006). The median OS for carboplatin/5-FU group was 17 m (95%CI 11-81) with 3 year OS of 38%. Cisplatin/5-FU group had a significantly better distant metastasis free survival (median 20 vs. 11 m, p=0.04) when compared to carboplatin/paclitaxel group. On multivariate analysis, cisplatin/5FU (hazard ratio(HR) 0.45, p=0.023) and carboplatin/5FU group (HR 0.46, p=0.095) were found to be associated with OS adjusted for other patient, disease and treatment related characteristics.

Conclusion: We report that patients receiving cisplatin/5-FU had a significant survival benefit compared to patients who received carboplatin/paclitaxel as a definitive treatment for esophageal and GEJ cancer. Carboplatin/5-FU might be a reasonable alternate for highly select patients. Clinical trials regarding optimal chemotherapy regimen are warranted for patients who are not surgical candidates.