

Impact of weight loss on patients with locally advanced esophageal and esophagogastric junction cancers treated with chemoradiotherapy

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Background: Malnutrition and weight loss are commonly observed in patient with esophageal and EGJ cancers. Chemoradiotherapy (CRT) is a mainstay of treatment for locally advanced esophageal and EGJ cancers. Impact of weight loss on patients with treated with CRT was not well studied.

Methods: Patients with locally advanced esophageal and EGJ cancer who received CRT were identified in our institutional database and allocated into low (LWL) and high (HWL) weight loss groups. HWL was defined as weight loss >5% of baseline during CRT.

Results: We analyzed 89 and 78 patients designated to undergo definitive or preoperative CRT, respectively. HWL was observed in 46% and 55% of patients treated with definitive and preoperative CRT, respectively. In the definitive CRT group, patients in the HWL group experienced significantly worse overall survival than those in the LWL group (1.2 years vs 1.95 years, HR 1.76, 95% CI 1.06–3.01, $p=0.0026$). Multivariate analysis revealed that baseline albumin (>3.0 g/dL) was significantly associated with longer OS of definitive CRT patients (HR 2.15, 95% CI 1.1-4.19, $p=0.024$). Tolerability and toxicities during CRT were not statistically different between groups.

Conclusions: Significant weight loss during CRT, which was commonly observed in patients with locally advanced esophageal and EGJ cancers, was associated with shorter OS of patients treated with definitive CRT, and albumin was an independent prognostic factor for OS. Nutritional support before and during treatment should be considered to potentially improve patients' outcomes.
