Nutritional Assessment of Geriatric Cancer Patients with Esophagus and Head and Neck Cancer (HNC)

Dr. Priyanka Srivastava
Rayos Comprehensive Cancer Care, Lambhvel, Gujarat, India

Abstract

Background: The oesophageal and HNC patients suffer from dysphagia and frequently present with undernourishment. The treatment related toxicities are higher and survival outcomes are poorer in undernourished patients. The geriatric cancer patients (age ≥ 65 years) encounter a unique challenge of age-related undernourishment, which further gets aggravated due to disease biology. There are very few studies from western Indian population to evaluated baseline malnourishment in geriatric cancer patients and its association with treatment outcome.

Objectives: To assess baseline nutritional status and its association with demographic, clinic-pathological and treatment outcome parameters in geriatric cancer patients undergoing chemotherapy treatment.

Materials and Method: This observational study was conducted at M.S.Patel Cancer Center, Shreekrishna Hospital, Bhaikaka Univeristy, Karamsad, Gujarat, India. The Geriatric cancer patients diagnosed with HNN and esophageal cancer, being treated with curative intent chemotherapy were enrolled in the study from April 2021 to March 2023 . Total 89 patients were included in this study . Baseline clinic-pathological data including geriatric assessment was noted. Based on body mass index (BMI) patients were dichotomized in to BMI < 18.5 i.e. undernourished and ≥18.5. An assessment of treatment outcomes including survival as per nutrition status was done.

Results: Out of total 89 patients, 78.7% were males, 95.5% patients were from middle and lower SES, 84.26% patients had HNC and 15.74% esophageal cancer. Patients with metastatic disease were not included in this study. At baseline presentation, as per BMI 33.7% patients were malnourished. On geriatric assessment, malnourishment (BMI < 18.5) was associated with presence of co-morbidity (p value <0.05). Patients with malnutrition required chemotherapy protocol modification and dose reduction (p value <0.05). Treatment completion rate for Chemotherapy and radiation therapy was inferior in malnourished geriatric patients. Primary progression while on treatment was noted in 10 patients with BMI < 18.5 and in 9 patients with BMI ≥ 18.5 (p value - 0.04). Although HR QOL global mean score and Overall survival were inferior in malnourished patients, it was statistically not significant.

Conclusion: A significant proportion of geriatric cancer patients with esophagus and HNC suffer from malnourishment. It adversely affects treatment completion rate and progression free survival in this group of patients. A timely nutritional assessment and dietary interventions should be an integral part of geriatric cancer patient management.

Keywords

Geriatric, Cancer, Malnutrition, BMI, Chemotherapy, Adverse drug reaction.