

Changes in health related quality of life in head and neck cancer patients treated with chemoradiation

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The objective of this study was to evaluate the changes in health related quality of life (HRQOL) in patients with head and neck cancer undergoing chemoradiation.

A prospective analytical study was conducted at a tertiary care center using a convenience consecutive sample of patients having histopathologically confirmed squamous cell carcinoma of head and neck region and who were prescribed chemoradiation. Socio-demographic and clinical data were recorded. European organization for research and treatment of cancer quality of life questionnaire (EORTC QLQ C30) and head and neck specific questionnaire (EORTC H&N 35) were administered on three occasions; baseline (immediately before the commencement of chemoradiation), six-weeks from baseline (at the end of the chemoradiation cycle) and after three-months from baseline. Demographic characteristics were summarized using descriptive statistics. Changes in HRQOL were compared on the three occasions with repeated measures ANOVA.

A total of 47 patients (37 males and 10 females) were recruited and their mean age was 58.7± 10.9 years. Compared to the pre-treatment level of overall HRQOL (672.6±91.9), the overall HRQOL significantly decreased at six weeks (600.80±48.80, P=0.008) and three months (627.5±62.89, P=0.001) but the score increased significantly at 3 months compared to six weeks (P=0.001). Although the global health status showed an improvement, it was not significant (64.7±23.1, 68.4±18.8 and 69.3±15.8). The functional scale significantly increased at six weeks (422.2±9.5, P=0.04) and decreased at 3 months (375.3±57.2, P>0.05) compared to baseline (410.9±13.5). The symptom scale decreased at 6 weeks (110.2±79.2) and 3 months (182.9±98.9) compared to baseline (197.0±18.9). However, it increased significantly at 3 months compared to 6-weeks (P=0.001).

In general, the improvement in HRQOL of patients suggests that the use of chemoradiation as a primary treatment for head and neck cancer patients is beneficial. The significant deterioration of functional and symptom domains suggest the need to control side effects of chemoradiation. It is recommended that long term changes (at least for 6 to 12 months) in HRQOL in this group of patients be evaluated further.