

Quality of Life following Chemoradiation and Postoperative Radiation for Locally Advanced Head and Neck Cancer

Nam P. Nguyen¹ Paul Vos^b Ulf Karlsson^c Phuc Nguyen^a Suresh Dutta^d
Claire Lemanski^h Adir Ludin^e Sue Rose^a Ly M. Nguyen^f Harold Ward^a
Shawn Huang^a Sabah Sallah^g

^aDepartment of Radiation Oncology, University of Texas Southwestern Medical Center at Dallas, Dallas, Tex., and Departments of ^bBiostatistics and ^cRadiation Oncology, East Carolina University, Greenville, N.C., ^dDepartment of Radiation Oncology, University of Southern California, Los Angeles, Calif., ^eDepartment of Radiation Oncology, Cleveland Clinic, Cleveland, Ohio, ^fResearch Division, Chemist, Houston, Tex., USA; ^gHematology Research, Novo Nordisk, Athens, Greece; ^hDepartment of Radiation Oncology, Val d'Aurelle, Montpellier, France; ¹Department of Radiation Oncology, University of Arizona, Ariz., USA

Key Words

Quality of life · Chemoradiation · Postoperative radiation ·
Locally advanced head and neck cancer

Abstract

Background: To evaluate the impact of chemoradiation and postoperative radiation on patients' quality of life (QOL) in a single institution. **Methods:** A retrospective analysis of 101 patients who had treatment for locally advanced head and neck cancer in a single institution. Forty-seven patients had chemotherapy and radiation, 54 patients underwent postoperative radiation. QOL was assessed with the University of Washington (UW), and the Hospital Anxiety (HA) and Depression (HD) questionnaires. All patients were free of disease at the survey time. **Results:** Mean and median UW scores were not different between the 2 groups: chemoradiation (65/67), postoperative radiation (62/63). Mean and median HA scores were 7.6/7 (chemoradiation), and 8.3/8 (postoperative radiation). Mean and median HD scores were 6.7/7 (chemoradiation), and 7.1/7 (postoperative radiation). Forty-four patients developed complications, with mean/median UW, HA, and HD scores of 55/55, 9.9/8, and 8.9/9, re-

spectively. These scores were significantly different compared to the 57 patients without complications: 70/70 ($p = 0.0001$), 6.5/6 ($p = 0.001$), and 8.9/9 ($p = 0.0001$). **Conclusion:** There was no significant difference in QOL between chemoradiation and postoperative radiation in this retrospective study with a relatively short follow-up in the chemoradiation group. In addition, there were more patients with resectable disease in the postoperative group which may explain the lack of difference in QOL between the two groups. Patients who developed complications following treatment experienced lower QOL, more anxiety and depression. Our study raised the need to conduct a prospective randomized study to assess the real impact of chemoradiation and postoperative radiation on patients' QOL.