Quality of Life in Patients Receiving Radiation Therapy for Non-Small Cell Lung Cancer

Lauri D. John, PhD, RN, CNS

Purpose/Objectives: To determine whether perceptions of quality of life (QOL) change over time in patients with non-small cell lung cancer (NSCLC) who receive curative radiation therapy (XRT).

Design: Descriptive, longitudinal.

Setting: Radiotherapy clinic of a comprehensive cancer center.

Sample: 23 patients with NSCLC, selected by nonprobability, consecutive sampling, receiving curative XRT.

Methods: Subjects completed the Functional Assessment of Cancer Therapy-Lung (FACT-L) before, during, and twice after completion of the XRT treatment course. Data were analyzed using descriptive statistics and a multivariate approach to analysis of variance for repeated measures.

Main Research Variable: QOL.

Findings: FACT-L scores were significantly lower during XRT than before XRT, were significantly higher one month after XRT than before or during XRT, and were not significantly different from the pretreatment level four months after XRT.

Conclusion: Perceptions of QOL change over time in patients with NSCLC receiving curative XRT. If the study findings are validated in a larger sample, nurses may be able to counsel patients with NSCLC receiving XRT. Nurses can inform patients that although QOL declines during XRT, the change is temporary because QOL will return to a level at least as high as the pretreatment level.

Implications for Nursing Practice: Nurses need to assess patients’ perceptions of QOL throughout the course of XRT and assess for sequelae of treatment that affect QOL. Nursing interventions need to be developed and implemented to more effectively manage treatment sequelae and maintain QOL in patients with NSCLC while they receive curative XRT.

Key Points . . .

➤ Patients with non-small cell lung cancer (NSCLC) perceive that their quality of life (QOL) decreases during radiation therapy (XRT) but increases following XRT.

➤ Patients receiving curative XRT for NSCLC need to know about the expected side effects of treatment that may affect QOL and how to manage them.

➤ Nurses need to implement interventions to minimize side effects of treatment and maximize patients’ coping strategies when they care for patients with NSCLC who receive XRT.

Lung cancer is the leading cause of cancer death in both men and women (American Cancer Society [ACS], 2001). The overall five-year survival rate for lung cancer is only 14%. Although the survival rate approaches 50% for patients with lung cancers detected and treated at an early stage, only 15% are detected early (ACS).

Approximately 85% of lung cancers are classified as non-small cell lung cancer (NSCLC), with the remainder classified as small cell lung cancer (SCLC) (Martini, 1993). SCLC usually presents with distant metastasis at the time of diagnosis and typically is treated with chemotherapy in combination with radiation therapy (XRT) (Turrisi, 1993). NSCLC has a slightly lesser tendency to present with widespread metastasis and is treated with surgery, XRT, and chemotherapy alone or in combination (Komaki & Cox, 1993). Although surgical resection has been considered to be the most effective treatment for stage I NSCLC, few lung cancers are detected at this early stage (ACS, 2001). According to clinical practice guidelines adopted by the American Society of Clinical Oncology in 1997, recommended treatment of unresectable, locally or regionally advanced NSCLC includes use of platinum-based chemotherapy regimens with or preceding XRT (Clinical Practice Guidelines, 1997). Improved survival of patients with NSCLC has been demonstrated through combined modality regimens; however, they have been accompanied by more severe early and late toxicities (Dillman et al., 1990; Dillman, Herndon, Seagren, Eaton, & Green, 1996; Sause et al., 1992, 1995). The effect of these regimens on patients’ lives, other than the occasional mention of increased incidence of toxicities, has not been reported in the literature.

Although the importance of quality of life (QOL) as a specific management objective in cancer treatment has been outlined (Bland, 1997), little research has been conducted on patients with lung cancer. The research on patients with lung cancer mainly has addressed the impact of chemotherapy in...