Nurse-Delivered Telephone Intervention to Reduce Oral Mucositis and Prevent Dehydration

Tracy A. Ruegg, PhD, ANP-BC, AOCN®, Janice M. Morse, PhD, RN, FAAN, and Raphael L. Yechieli, MD

Patients with cancer receiving chemotherapy and radiation therapy experience multiple co-occurring symptom clusters from side effects of treatment (Honea et al., 2007). Oral mucositis is a frequent symptom experienced within a symptom cluster by a significant majority of patients with lung or head and neck cancer (Bar-Ad et al., 2014; Elting et al., 2008). Oral mucositis is an acute, painful condition precipitated by symptoms of a sore mouth or sore throat, leading to difficulty swallowing or speaking, mood disturbances, and other symptoms. If left untreated, patients can become dehydrated and malnourished, resulting in treatment delays, inadequate cancer treatment, and, ultimately, a poorer prognosis (Arrieta et al., 2013; Deek et al., 2016). Uncontrolled oral mucositis symptoms worsen overall symptom severity and negatively affect a patient’s health-related quality of life (HRQOL) (Bar-Ad et al., 2014; Elting et al., 2008). Patients with lung or head and neck cancer are the most frequent visitors to emergency departments and urgent care centers seeking symptom relief (Barbera et al., 2010, 2013; Eskander et al., 2018; Mayer et al., 2011; Ruegg, 2013).

Anxiety and depression coupled with symptom severity and distress are found more often in patients with lung or head and neck cancer than in other patients with cancer (Buchanan et al., 2010; Liao et al., 2011; Mehnert et al., 2014; Salvo et al., 2012; Zabora et al., 2001), resulting in reduced symptom management, decreased HRQOL, and twice the risk of an accelerated death than patients not experiencing anxiety and depression (Arrieta et al., 2013; Chen et al., 2011). Patients with oral mucositis also experience increased depressed mood as a correlative symptom while undergoing chemotherapy and radiation therapy (Mason et al., 2016). In addition, these patients have high levels of supportive care needs in health information and communication, leading to increased...