Management of Dysphagia in Patients With Head and Neck Cancer

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Dysphagia is one of the most common symptoms affecting patients with head and neck cancer. It can lead to several complications and affect patients’ quality of life. The advanced practice nurse can play an important role in the plan of care for managing this condition in patients with head and neck cancer.

A 65-year-old male, A.B., reported to his primary care provider for evaluation after months of swallowing difficulty and jaw pain. The patient was sent for a computed tomography scan of the head and neck. The scan showed a 3 cm mass at the base of his tongue. Biopsy of the mass revealed a poorly differentiated squamous cell carcinoma, which tested positive for human papillomavirus. A.B. is referred to an oncologist where he undergoes a positron-emission tomography scan that reveals lymph node involvement. He is diagnosed with stage III head and neck cancer, originating from the base of the tongue. A.B.’s plan of care includes concurrent radiation therapy and chemotherapy, specifically cisplatin. After determining his treatment plan, A.B. meets with an advanced practice nurse (APN) who discusses treatment, possible side effects, and expectations. Because A.B.’s treatment options have a high risk of dysphagia, the APN refers him to a nutritionist, speech therapist, and physical therapist.

Head and Neck Cancer

Head and neck cancers involve several organ systems, which can result in a more challenging care plan and closer monitoring of symptoms or side effects. In addition, some head and neck cancer treatments can lead to disfigurement, dysfunction, and disability, impairing quality of life (Bower, Vlantis, Chung, & Van Hasselt, 2010). Particular treatments also can lead to functional disabilities, putting patients at higher risk for adverse effects such as xerostomia, infection, aspiration, and nutritional deficiencies. Most patients with head and neck cancer have a survival rate of five years, and even survivors are at a high risk for recurrence, lymph node involvement, and new metastasis. Unfortunately, because of the poor prognosis for patients with head and neck cancer, quality-of-life issues can be overlooked (Bower et al., 2010).

Dysphagia

Dysphagia is one of the most common adverse effects in patients with head and neck cancer and is strongly associated with decreased quality of life because of problems with speech, swallowing, and malnutrition (Bower et al., 2010). APNs can aid in further addressing these issues, as well as other deficits that may arise, for patients with dysphagia caused by head and neck cancer treatment.

Dysphagia Management

A multidisciplinary approach is needed to manage dysphagia; however, APNs can play a vital role by implementing and evaluating interventions. Although several different referrals from speech, physical, and occupational therapists are essential, patient education and interventions can be coordinated by the APN. Swallowing disorders and dysphagia caused by head and neck cancer treatments should be managed by both compensatory procedures and rehabilitation programs (Platteaux, Dirix, Dejaeger, & Nuyts, 2009).

Rehabilitation therapy involves several types of swallowing exercises to increase motility and strength in the affected area. According to Platteaux et al. (2009), rehabilitation therapy is designed to improve range of motion and sensory-motor integration. To heighten sensory awareness and facilitate bolus transit during swallowing, Lewin (2012) suggested that swallowing exercises may include using specific swallowing maneuvers, changes in body posture and range of motion, as well as resistance exercises or techniques. Shaker exercises (i.e., isometric and isokinetic neck exercises that consist of lifting and holding the neck) diminish dysphagia by improving the width and duration of the upper esophageal sphincter opening. In addition, other controlled-swallow maneuvers (e.g., supra-glottic swallow, super-supraglottica swallow, Mendelsohn maneuver, effortful swallow) can be used to change neuromuscular control (Platteaux et al., 2009). APNs should stress that these exercises should not only be started once dysphagia is present, but prior to the start of treatment, which
may lessen the long-term effects for the patient. Therefore, exercise regimens should be established by the APN prior to the start of radiation therapy, and patients should adhere to them throughout the treatment, as well as once treatment is completed (Lewin, 2012). According to Lewin (2012), patients who performed swallowing exercises throughout their treatment had high patient-reported quality of life in relation to swallowing.

Early referral to a speech-language pathologist is essential to ensure adequate assessment of swallow function and to generate a treatment plan that includes patient education and swallow therapy. In addition, speech therapy is effective in improving speech intelligibility, even after resection (Lewin, 2012). Mitra, Mishra, and Bhatnagar (2006) suggested that speech therapy may help patients develop strategies to lower the speed of speech, break words into syllables, maintain face-to-face contact, and reduce background noises. Collaboration with dietitians will ensure adequate, safe nutrition and will identify patients with clinically significant aspiration. Speech therapists also can aide in maintaining social interaction to help improve patients’ quality of life.

In addition to speech therapy, prosthetic options now exist for patients who experience surgical resection, osteoradionecrosis, or tumor complications that affect the vocal chords. If 50% or more of the tongue is removed during surgical resection, the use of prosthetics can improve speech production and swallowing (Lewin, 2012). APNs should be knowledgeable about interventions within their scope of practice and make referrals when necessary to manage dysphagia and maintain the patient’s quality of life.

Conclusions

As APNs begin to specialize in the field of oncology, a main job focus will concentrate on managing symptoms and providing interventions to prevent complications of therapy. The APN, along with the multidisciplinary team, can implement care plans that involve swallowing exercises to increase range of motion, compensatory exercises to prevent worsening of dysphagia and malnutrition, as well as education on preventing aspiration.

APNs also can participate in education and pretreatment counseling to provide realistic expectations for recovery and to reinforce the patient’s responsibility regarding aggressive rehabilitation (Lewin, 2012). According to Wells et al. (2007), nurse specialists have expanded their role, coordinating complex treatment regimens and supporting patients with head and neck cancer who have more complicated symptom burdens. Patients with head and neck cancer are a unique patient population and require extensive educational, interventional, and holistic care during and after treatment. APNs possess the education and skills necessary to provide quality, evidence-based care for patients with head and neck cancer throughout the management of dysphagia, thereby improving quality of life.

References


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