Use of a Speech-Generating Device for Hospitalized Postoperative Patients With Head and Neck Cancer Experiencing Speechlessness

Carmen Rodriguez, PhD, ARNP, and Meredith Rowe, PhD, RN

Hospitalized patients recovering from surgery for head and neck cancer may find themselves suddenly speechless and without a mechanism to reliably communicate their needs. Sudden speechlessness may occur when structures essential to speech are removed (laryngectomy) or disabled (tracheal intubation) as a result of surgery. Patients are unable to verbalize normal comfort and care needs (e.g., pain relief, need for repositioning, toileting) and are powerless to communicate even critical needs (e.g., difficulty breathing, immediate need for suctioning or blocked airway, inadvertent disconnection of ventilators or oxygen, bleeding from disconnected IV lines) (Happ, 2000; Rodriguez, 2003).

In an effort to communicate, speechless patients and nursing staff draw on their own ingenuity to identify alternate face-to-face communication strategies. However, the strategies typically are slow, energy-draining methods such as mouthing words; nodding to a series of yes or no questions; and use of writing pads, alphabet boards, hand signals, and facial gestures. In addition, speechless patients are limited to using electronic intercom systems to verbalize their needs when staff members are not present (Rodriguez, 2003). Clearly, current practice does not adequately address this population’s need for communication with nurses to prevent and rapidly treat dangerous situations and lessen frustration, anxiety, fatigue, and dissatisfaction with provided care (Ashworth, 1984; Happ, 2000; Patak, Gawlinski, Fung, Doering, & Berg, 2004; Rodriguez, 2003; Stovsky, Rudy, & Dragonette, 1988).

Communication issues may be solved effectively with programmable speech-generating devices (PSGDs). Commonly used to facilitate communication for people experiencing chronic speechlessness, some devices allow for use of recorded messages that can be matched with a symbol graphically representing each message. The speechless patient then is able to play a message on command by selecting or activating the associated symbol. Although PSGDs are a standard approach to facilitate the communication process for individuals with a chronic impairment, limited research studies have focused on use of PSGDs for hospitalized postoperative patients with head and neck cancer experiencing sudden speechlessness.