Palliative Care and Dyspnea

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Dyspnea is a frequent focus of palliative care, which nurses can better address using the skills of comprehensive assessment and an updated knowledge base about appropriate medical, pharmaceutical, and nonpharmaceutical interventions. A solid clinical foundation about dyspnea allows clinicians to establish an effective plan of care. This column features two clinical case studies, which review clinical assessment in palliative care and appropriate targeted treatment strategies and interventions.

The American Thoracic Society (ATS, 1999) defined dyspnea as an uncomfortable awareness of breathing. Patients sometimes refer to dyspnea as shortness of breath, air hunger, or a smothering sensation. Those descriptors are not always associated with hypoxia or decreased oxygen saturation, specifically less than 90%. Patients can experience hypoxia and dyspnea together or separately.

An estimated 15%-70% of patients with cancer experience dyspnea (Dudgeon, Kristjanson, Sloan, Lertzman, & Clement, 2001; Joyce, 2010; Klein, Lang, Bükkí, Sittl, & Ostgathe, 2011). The cause of dyspnea in patients with cancer may or may not be related to the cancer itself. Dyspnea related to cancer can be a result of lung cancer (primary or metastasis), pulmonary toxicity related to chemotherapy or radiation treatments, or surgical treatments to the thoracic cavity and effusions (Joyce, 2010).

Although a patient’s history of cancer may not suggest a risk for dyspnea, many noncancer factors increase the risk of dyspnea, including diagnosis or history of asthma, chronic obstructive pulmonary disease (COPD), allergies, anxiety, congestive heart failure (CHF), and smoking (Dudgeon et al., 2001). Dyspnea also increases at the end of life, frequently signaling to clinicians that the change in respiratory status means death is imminent.

Assessment

With multiple risk factors associated with dyspnea, a thorough assessment identifying its causes leads to appropriate and effective treatment options. Figure 1 lists objective and subjective areas of assessment.

Dyspnea assessment should begin by asking the patient if he or she is short of breath. At the end of life, patients’ cognitive function often declines, leaving them unable to respond to yes or no questions. One assessment tool to use with unresponsive or cognitively impaired patients is the Respiratory Distress Observation Scale (RDOS). The RDOS is an ordinal scale that uses eight parameters, allowing the clinician to rate dyspnea based on their own observations of the patient (Campbell, Templin, & Walsh, 2010).

Assessments can suggest the cause of the dyspnea. For example, if the patient has a long-standing COPD history, he or she may show signs of clubbing on finger tips. If a pleural effusion is present, lung sounds may be absent or diminished (Joyce, 2010).

Treatment

Guidelines for palliative care recommend that initial treatment for dyspnea should target the underlying cause—cancer or noncancer related (National Comprehensive Cancer Network [NCCN], 2013). Then, relief of symptoms can proceed. With a confirmed effusion, the treatment of choice usually is fluid removal. If accumulated fluid is a pleural effusion, thoracentesis is ordered (see Figure 2). Typically, the procedure is performed at the bedside or in a procedural area (e.g., interventional radiology).

During thoracentesis, a needle is inserted into the effusion area and fluid is drawn out. Pathology review of the fluid determines the cause of the fluid collection. If the evaluated fluid is related to malignancy, the effusion will likely return. If a patient is having multiple procedures to drain the effusion, the physician may order placement of an indwelling catheter to manage the malignant effusion.

A hypoxic patient is treated with oxygen therapy. When patients are anxious, benzodiazepines are a treatment option (NCCN, 2013). If inflammation is present, corticosteroids may be ordered (Klein et al., 2011). The inflammation could be related to a malignancy, allergies, or noncancerous pulmonary conditions.

At the end of life, excess secretions can be present, often referred to as the “death rattle.” Scopolamine, atropine 1% sublingual drops, and glycopyrrolate all have been shown to be effective treatments (NCCN, 2013). With known or unknown etiology for dyspnea, opioids can decrease symptoms. For cases of confirmed effusion when the patient is waiting for thoracentesis, opioid treatment can help