Dyspnea and Delirium at the End of Life

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Dyspnea and delirium are potentially distressing symptoms for patients with cancer at the end of life. They require aggressive management and sometimes even palliative sedation for refractory cases in actively dying patients. This article provides oncology nurses with evidence-based advice on the management of these symptoms.

At a Glance

- Dyspnea and delirium are two common symptoms in patients with cancer at the end of life.
- Systemic opioids are the primary pharmacologic treatment for the symptomatic treatment of dyspnea.
- Haloperidol (Haldol®) and chlorpromazine (Thorazine®) are the most commonly used pharmacologic treatments for delirium. Benzodiazepines are used as palliative sedation for refractory delirium in dying patients.

This article focuses on the symptoms of dyspnea and delirium, which can be extremely distressing to patients with cancer at the end of life. Oncology nurses are well suited to detect and treat these symptoms.

Dyspnea

Dyspnea, which is shortness of breath or the sensation of breathlessness, is one of the most difficult symptoms to treat for patients at the end of life. Earlier in the disease course, efforts usually focus on trying to treat or eliminate the underlying cause of the patient's dyspnea (e.g., drainage of a pleural effusion, chemotherapy or radiation therapy to try to shrink lung cancer or metastases). However, at the end of life, the focus is usually on symptomatic treatment because the potential burdens outweigh the benefits of pursuing additional diagnosis and aggressive treatments for any underlying etiology causing the patient's dyspnea.

Systemic opioids are one of the long-time, primary options for symptomatic pharmacologic management of dyspnea, but few research studies corroborate their efficacy in patients with cancer. In 2008, several systematic reviews substantiated that opioids help control dyspnea in patients with cancer (Ben-Aharon, Gafter-Gvili, Leibovici, & Steimer, 2008; Booth, Moosavi, & Higginson, 2008; Viola et al., 2008). A more recent systematic review and meta-analysis by Ben-Ahron, Gafter-Gvili, Leibovici, and Steimer (2012) concluded that opioids are the only evidence-based pharmacologic symptomatic treatment option for cancer-related dyspnea. A study by Gomutra, O’Riordan, and Pantilat (2013), which mostly included patients with cancer, indicated that a combination of benzodiazepines and opioids may be beneficial for the treatment of dyspnea, but benzodiazepines have not been found to have clear and convincing evidence of their efficacy in treating dyspnea in patients with cancer.

However, benzodiazepines can be used to treat intractable dyspnea refractory to all other treatments at the end of life in the form of palliative sedation (Mercadante et al., 2011). Other agents, such as chlorpromazine (Thorazine®) or haloperidol (Haldol®), have also been used to initiate palliative sedation in patients with cancer experiencing dyspnea (Caraceni et al., 2012). Palliative sedation should not be initiated unless dyspnea is truly refractory to other treatments and only with the patient’s and family’s consent prior to initiation at the end of life.

A fan blowing air across the face is a nonpharmacologic intervention that has been shown to have some efficacy in a randomized, controlled, crossover trial (Galbraith, Fagan, Perkins, Lynch, & Booth, 2010). Oxygen therapy does not appear to have good evidence for its use at the end of life (Abernethy et al., 2010; Campbell, Yarandi, & Dove-Medows, 2013; Choosing Wisely®, 2015).
Delirium

Delirium is a common symptom at the end of life, occurring in as many as 85% of dying patients (Breitbart & Alici, 2008). It is also known as terminal delirium, an irreversible condition that usually occurs as a result of sepsis or organs shutting down in the last hours to days of life (Breitbart & Alici, 2008). The most troublesome type of delirium is hyperactive delirium. It usually requires immediate intervention. Nurses can first try to identify a potential etiology to treat easily reversible causes of delirium using the acronym CHIMBOP (constipation, hypovolemia/hypoglycemia, infection, medications, bladder, oxygen level, and pain) (Heidrich & English, 2015).

According to multiple expert opinions and literature reviews, haloperidol continues to be the first-line antipsychotic pharmacologic treatment for irreversible hyperactive delirium, followed closely by chlorpromazine (Breitbart & Alici, 2008; Bush et al., 2014; Irwin, Pirrello, Hirst, Buckholz, & Ferris, 2013). Both medications can be given orally, via IV, subcutaneously, intramuscularly, or per rectum (Bush et al., 2014; Irwin et al., 2013). Other atypical antipsychotics, such as risperidone (Risperdal®), olanzapine (Zyprexa®), quetiapine (Seroquel®), and aripiprazole (Abilify®), can be used as second-line therapy or if side effects occur (e.g., extrapyramidal symptoms) (Bush et al., 2014). For refractory, irreversible hyperactive delirium in dying patients, or any time a patient is believed to have terminal hyperactive delirium with only hours to days left to live, healthcare providers may consider initiating full palliative sedation with benzodiazepines (Irwin et al., 2013). Delirium has been found to be the primary reason for initiating palliative sedation in general, and its use has not demonstrated a reduction in length of survival (Maltoni et al., 2012).

Although no research exists to support the use of nonpharmacologic interventions to treat delirium, particularly irreversible, hyperactive terminal delirium, the acronym CHIMBOP may guide oncology nurses in finding potential etiologies. According to Breitbart and Alici (2012), some nonpharmacologic interventions may include fostering healthy sleep, frequent reorientation, regular repositioning, and bowel and bladder monitoring.

Conclusion

Dyspnea and delirium can be bothersome to patients and caregivers, and they can be challenging symptoms for oncology nurses to manage at the end of life. Both symptoms have evidence-based treatment options, such as systemic opioids for dyspnea, typical and atypical antipsychotics for delirium, and palliative sedation with benzodiazepines or other sedating medications for refractory cases of either symptom. Oncology nurses should monitor for these symptoms and be aware of potential treatment options, particularly at the end of life.

References


