Assessment and Management of Delirium in the Older Adult With Cancer

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Recognizing delirium and its impact on older patients and their caregivers is an important aspect of oncology nursing. Delirium is the most common complication of hospital admissions for older adults and is associated with a significant amount of morbidity and mortality, prolonged hospital stays, functional decline, and decreased quality of life. Oncology nurses caring for older patients with cancer have the opportunity to recognize the onset of delirium, provide ongoing patient assessment and monitoring, and implement pharmacologic and nonpharmacologic interventions.

M.H. is an 80-year-old man who has been treated with chemotherapy for chronic lymphocytic leukemia. He has not received opioids for pain in the past. M.H. was at home when he fell off a stool and landed on his coccyx, causing severe pain. He was taken to the emergency department (ED), where he reported that the pain in his lower back and coccvx area ranked as a 10 out of 10. He was given morphine sulfate, 2 mg via IV, which did not bring down his pain level. He was then given a second dose of morphine sulfate, 2 mg via IV, followed by another 5 mg morphine sulfate via IV, which brought his pain level down to a 6 out of 10. His laboratory results at that time were white blood cell count = 350,000, creatinine = 3.5, hemoglobin = 9, blood urea nitrogen (BUN) = 75, and platelets = 40,000. After several hours in the ED, M.H. became slightly agitated and was found trying to climb out of bed. He was seen by neurology and a head computed tomography scan was ordered. The scan came back normal. An x-ray of the sacrum and coccyx revealed a probable fracture at lumbar vertebrae L4-L5. M.H. was then admitted to an inpatient unit and given a patient-controlled analgesia (PCA) pump for pain that was programmed to administer morphine sulfate at 1 mg per hour with rescues of 1 mg every 15 minutes as needed. M.H. became progressively confused and agitated during the following 12 hours. Based on criteria outlined in

the *Diagnostic and Statistical Manual* of *Mental Disorders*, 4th edition, M.H. received a diagnosis of agitated, hyperactive delirium (American Psychiatric Association, 2000).

Etiology of Delirium

Delirium is a common and serious condition in older adults with cancer and is the most common complication of all hospital admissions for that population. Increasing age, dementia, sensory losses, advanced illness, complex cancer treatments, and use of pharmaceuticals increase the risk of delirium in older adults with cancer. Predisposing factors are baseline vulnerabilities, such as preexisting dementia. Precipitating factors are the acute and noxious stimuli and insults experienced, such as surgery and prolonged hospitalization (Holroyd-Leduc, Khandwala, & Sink, 2010; Michaud et al., 2007). Metabolic abnormalities, including electrolyte disturbances such as uremia, hypo- and hyperglycemia, hypoand hypernatremia, and hypercalcemia, as well as dehydration, malnutrition, and infection, among other factors, can contribute to the development of delirium in older patients with cancer (see Table 1). In addition, several drugs in different classes are associated with the development of delirium in older adults (see Figure 1).

Delirium also is common in patients with AIDS, the critically ill, postoperative patients, and those who are terminally ill (Fann, 2000). Delirium is associated with a significant amount of morbidity and mortality, causing increased hospital stays, cognitive and functional decline, and decreased quality of life, leading to nursing home placement (Marcantonio et al. 2003; McCusker, Cole, Dendukuri, & Belzile, 2003). Patients with delirium experience more falls, have a greater incidence of pressure ulcers, and are unable to care for themselves. In older patients with cancer, delirium can interfere with symptom assessment and treatment because the patient cannot communicate distress. At the end of life, delirium prevents patients from communicating with their families and participating in end-oflife care decisions. Prevention is the most

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