Case Study: Ms. G, a 78-year-old woman with a history of heart failure and a left ventricular ejection fraction of 45%, had an exploratory laparotomy with colon resection and colostomy two days ago for an obstructive stage IIIB adenocarcinoma of the colon. She is a patient on a general surgical unit. Upon assessment at 7 am, Ms. G was easily aroused and oriented. She has a patient-controlled analgesia (PCA) pump for postoperative pain control with 1 mg of morphine available every 30 minutes; she used a total of 4 mg of morphine via IV since midnight. Ms. G requires belladonna and opium suppositories about every eight hours to treat bladder spasms associated with her urinary catheter. At 10 am, the wound/ostomy nurse reported that Ms. G appeared anxious and complained of feeling “too mixed up” to review ostomy teaching. Ms. G’s daughter asked for something to help Ms. G’s “nerves.” Ms. G slept most of the afternoon after receiving 0.5 mg of lorazepam via IV at 11 am. Upon assessment at 4 pm, Ms. G is arousable but drowsy. She follows directions when assisted out of bed to a chair but moves slowly and is wincing. When asked if she is having any pain, she mumbles responses that are incoherent but appears comfortable after settling in the chair. After being in the chair for 30 minutes, Ms. G is heard yelling for help. She has pulled out her nasogastric tube and is combatively resisting the assistance of her nurse and personal care assistant.

Etiology
Delirium is a common, serious neuropsychiatric complication of severe illness and hospitalization that frequently is unrecognized or misdiagnosed. The prevalence of delirium ranges from 10%–80%, depending on the population and setting; it may occur in 25%–50% of hospitalized patients with cancer (Fann & Sullivan, 2003). Delirium is associated with increased mortality and morbidity, including prolonged hospital stays, functional decline, and long-term care placement.

Features of delirium are acute onset of fluctuating awareness, impaired ability to attend to environmental stimuli, and disorganized thinking (American Psychiatric Association, 2000). The three recognized subtypes of delirium are hyperalert-hyperactive, hypoalert-hypoactive, and mixed. Patients with hyperalert-hyperactive delirium often have increased psychomotor activity, are hypervigilant, talk faster and louder than usual, are easily distracted, and may be uncooperative or combative. Those with hypoalert-hypoactive delirium exhibit decreased activity and lethargy, talk less than usual, have difficulty following a conversation, and exhibit confusion. Patients with the mixed subtype of delirium show features of or fluctuation between the other two subtypes (Camus et al., 2000; Young & Inouye, 2007). Hypoalert-hypoactive delirium is less likely to be diagnosed because patients generally are cooperative and behaviors are easily attributed to old age or dementia (Forrest et al., 2007).

The development of delirium involves the interaction of predisposing risk factors with one or more precipitating factors. Predisposing risk factors include older age (older than 65), frailty, visual or hearing impairment, malnutrition, severe illness, multiple diseases, dementia, and renal impairment. See Figure 1 for common precipitating factors.

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