

# Characteristics of Inpatients With Blood Cancers Who Experience a Fall: A Retrospective Study

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**BACKGROUND:** Inpatients with cancer are at the greatest risk for falling. Although studies have identified the characteristics of patients with cancer who fall, few studies have focused on the characteristics of patients with blood cancers who fall.

**OBJECTIVES:** The objectives of this study are to identify characteristics of inpatients with blood cancers who fall and implement fall-mitigation efforts through an enhanced assessment of chemotherapy-induced peripheral neuropathy.

**METHODS:** Descriptive design and retrospective review of 51 patient falls were used to identify characteristics of inpatients with cancer who fell.

**FINDINGS:** The majority of patients who fell were male (n = 33), and most falls occurred during the day shift (n = 24). Few patients were listed on the Morse Fall Risk Scale for mental status and forgetting limitations (n = 7), and most were not identified as a high fall risk (n = 30). The majority of falls were associated with toileting needs (n = 32). Patients spent a mean of 12.73 days in the hospital before falling. Thirty-two patients received chemotherapy prior to their fall, 25 of whom received neurotoxic chemotherapy.

## KEYWORDS

inpatient falls; blood cancers; fall characteristics; peripheral neuropathy; fall risk

## DIGITAL OBJECT IDENTIFIER

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**WHEN PATIENTS ENTER THE HOSPITAL**, they trust it is an environment for healing. Healthcare providers are responsible for evaluating the environment and processes to maintain patient safety (Joint Commission, 2019; Patient Safety Network, 2019; Shorr et al., 2021), yet patient falls still occur. To deliver high-quality care, it is imperative to create a safe environment where patients do not fall.

Falls in acute care put patients at significant risk for complications and death (Joint Commission, 2021). U.S. hospitals experience a fall rate of three to five per 1,000 patient days (Zhao et al., 2019). Of the patients who fall, 30%–86% experience an injury (Constantinou & Spencer, 2021; Tsai et al., 2017). Patients who experience a fall with serious injury while in the inpatient setting have a greater length of stay by 6–12 days (Zhao et al., 2019). The Centers for Disease Control and Prevention (2020) report the annual medical costs associated with older adult nonfatal falls to be about \$50 billion, of which \$754 million is for fatal fall costs. Multiple evidence-based practices have been developed to prevent falls, yet they still occur (Tucker et al., 2019).

Patients with cancer are at a greater risk for injury associated with a fall because of their disease and its treatments, and they experience higher fall frequency and injury rates than other hospitalized patients (Jun et al., 2018). Patients with cancer who fall may also experience delays in their treatments, altering their disease progression and prognosis (Sattar et al., 2016).

Studies have identified numerous characteristics and risk factors of patients with cancer who fall (Jun et al., 2018; Najafpour et al., 2019; Tsai et al., 2017). However, information is limited regarding the characteristics of patients with blood cancers who experienced a fall while hospitalized (Lorca et al., 2019; Miwa et al., 2017).

The purpose of this study is to describe the characteristics of patients with blood cancers who fall in the inpatient care setting. It also assessed chemotherapy-induced peripheral neuropathy (CIPN) as a fall mitigation intervention.

## Methods

This was a retrospective descriptive study, and the project was approved by the Central Institutional Review Board of H. Lee Moffitt Cancer Center and Research Institute in Tampa, Florida.