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Nursing Considerations for Optimal Outpatient Management of Adult Patients With Leukemia Treated With Clofarabine

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Despite improvements in treatment, the outcome for some adult patients with acute or chronic leukemias remains poor. Clofarabine, a second-generation purine nucleoside analog, received U.S. Food and Drug Administration approval in 2004 for the treatment of pediatric patients with relapsed or refractory acute lymphocytic leukemia after at least two previous regimens. In addition, clinical studies have shown encouraging safety and efficacy results with clofarabine in the treatment of adult patients with various hematologic malignancies. Although most adult patients with leukemia receive the first course of clofarabine while hospitalized, many can be subsequently treated as outpatients with proper monitoring, support, and education. The most frequent side effects associated with clofarabine are gastrointestinal-related, myelosuppression, hepatotoxicity, renal dysfunction, and anorexia. Careful patient monitoring is essential to ensure early identification and prompt intervention. Younger patients and those of any age with no comorbid health issues, good performance status, and an adequate support network are more likely to tolerate outpatient clofarabine administration. Early identification and proactive pharmacologic and nonpharmacologic interventions may reduce the severity of these toxicities and prevent their progression. Patient education about strategies for prevention and management of symptoms also is essential.

An estimated 43,050 adults were diagnosed with acute or chronic leukemia, and 21,840 died of the disease in 2010 (Jemal, Siegel, Xu, & Ward, 2010). Encouragingly, the overall relative five-year survival rate for adults with leukemia has improved from 35% in the mid-1970s to 54% in 2005 (Jemal et al., 2010). However, despite the fact that most patients with acute myelogenous leukemia (AML) are older than age 60, the outcome for older patients with AML remains essentially unchanged since the mid-1980s (Burnett & Mohite, 2006). Older adults with good performance status can benefit from standard therapies, but many older patients cannot tolerate such therapies, respond poorly because of adverse cytogenetics, or face a higher risk

At a Glance

- Clofarabine, a second-generation purine nucleoside analog, has shown promising safety and efficacy results in clinical trials of adult patients with acute leukemia.
- Anorexia, nausea, vomiting, diarrhea, myelosuppression, hepatoxicity, and renal dysfunction are the most common toxicities associated with clofarabine treatment.
- Although clofarabine usually is administered on an inpatient basis, with careful monitoring, support, and education, many patients can subsequently be treated as outpatients.

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