Acute promyelocytic leukemia (APL), a subtype of acute myeloid leukemia (AML), was once considered the most fatal form of AML because of its significant propensity for bleeding and the subsequent high mortality rate associated with early hemorrhagic death (Coombs, Tavakkoli, & Tallman, 2015). However, advances in the understanding of the disease process and improvements in the available therapies since the 1980s have led to its being considered the most curable. The goal of early and well-managed treatment induction is to reduce the malignant burden of promyelocytes to below the cytologically detectable level.

**Objectives:** Oncology nurses who care for patients with APL need to be acutely aware of the basic differences in this disease from other forms of leukemia, including the two main complications for the newly diagnosed patient: disseminated intravascular coagulation and differentiation syndrome.

**Methods:** This article will briefly review APL and its associated presenting symptoms, prognosis, treatment, and complications.

**Findings:** These complications require immediate activation of expert staff and resources to protect critically ill patients with APL from associated morbidity and mortality.

**Background:** Acute promyelocytic leukemia (APL), once the most lethal form of adult acute leukemia, has become the most curable. The goal of early and well-managed treatment induction is to reduce the malignant burden of promyelocytes to below the cytologically detectable level.

**Key words:** acute promyelocytic leukemia; disseminated intravascular coagulation; differentiation syndrome; fibrinogen; all-trans retinoic acid

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