© Oncology Nursing Society. Unauthorized reproduction, in part or in whole, is strictly prohibited. For permission to photocopy, post online, reprint, adapt, or otherwise reuse any or all content from this article, e-mail pubpermissions@ons.org. To purchase high-quality reprints, e-mail reprints@ons.org.

The Role of Oncology Nurses in the Care of Adults With Sickle Cell Disease

Coretta Jenerette, PhD, RN, AOCN®, CNE, and Ashley Leak, PhD, RN-BC, OCN®

Oncology nurses are experts in pain management, and pain is the hallmark of sickle cell disease (SCD). Because individuals with cancer and individuals with SCD often receive care from hematologists or oncologists and are admitted to the same nursing units, oncology nurses need to have an understanding of SCD and the challenges that these individuals face.

Coretta Jenerette, PhD, RN, AOCN®, CNE, is an assistant professor in the School of Nursing and Ashley Leak, PhD, RN-BC, OCN®, is a Cancer Care Quality Post-Doctoral Fellow in Health Policy and Management in the Gillings School of Global Public Health and an adjunct assistant professor in the School of Nursing, all at the University of North Carolina at Chapel Hill. This research was funded, in part, through a National Institute of Nursing Research grant (K23NR011061) to Jenerette and a National Cancer Institute grant (5R25CA116339) to Leak. The authors take full responsibility for the content of the article. The authors did not receive honoraria for this work. No financial relationships relevant to the content of this article have been disclosed by the editorial staff. Jenerette can be reached at coretta.jenerette@unc.edu, with copy to editor at CJONEditor@ons.org.

Digital Object Identifier: 10.1188/12.CJON.633-635

Oncology nurses most often care for patients who are admitted for oncologic or malignant hematologic disorders. As a result of the disorder and treatment, pain is a significant symptom for many of these patients. Oncology nurses are experts in pain assessment and pain management. For that reason, other populations that experience pain as a significant symptom of their disease may benefit from the pain management skills of oncology nurses. One such population is individuals with sickle cell disease (SCD), a noncancerous hematologic disorder.

Pain is the hallmark symptom of SCD. Individuals with cancer and those living with SCD often receive care from hematologists and oncologists and may be admitted to the same unit. Therefore, oncology nurses need to have an understanding of the care of individuals with SCD and the challenges they face with a chronic disease. The purposes of this article are to provide a brief overview of SCD, compare the pain of SCD and cancer, and provide suggestions on the role oncology nurses can have in the management of hospitalized individuals with SCD.

Overview of Sickle Cell Disease

SCD refers to a group of inherited conditions in which a gene mutation causes the hemoglobin to assume a sickle shape, promoting vaso-occlusion and leading to both acute and chronic vascular inflammation (Ballas et al., 2012). The hallmark of the disease is pain caused by vaso-occlusion, reperfusion injury, and hypoxemia (Rees, Williams, & Gladwin, 2010). SCD affects about 1 in 500 African Americans and Hassell (2010) noted a U.S. SCD population estimate of 72,000–98,000 when corrected for early mortality. As a result of newborn screening, prophylactic penicillin treatment in childhood, and other aggressive treatments for pain and disease complications, Platt et al. (1994) reported that the median age of death was 42 years for males with homozygous HbSS disease or SCD-SS and 48 years for females with SCD-SS, whereas in individuals with heterozygous or SCD-SC, the median ages of death were 60 and 68 years for males and females, respectively. Although advances have been made in the diagnosis and treatment of SCD, it remains a difficult, chronic medical condition with acute painful exacerbations. Mousa et al. (2010) noted that an acute painful crisis is characterized by a sudden onset of pain that might start in any part of the body, including the back, long bones, and chest; the pain ranges from mild to severe or even excruciating and has been described as deep, gnawing, and throbbing.

Pain episodes or crises can last hours or days, and individuals with SCD may have episodes once or many times a year. In a study of 232 individuals with SCD aged 16 years and older, Smith et al. (2008) found that pain was reported on about 55% of 31,017 analyzed diary days, and about 29% of the patients reported pain on more than 95% of these days; only 14% reported pain on 5% or fewer days. Smith, Jordan, and Hassell (2011) concluded that in adults with SCD, pain often is the rule rather than the exception, and is far more prevalent and severe than previous studies have suggested.

Transition in the Delivery of Care

Introduced in 1996, hospitalists are physicians, nurse practitioners, or physician assistants who specialize in delivering comprehensive medical care to hospitalized patients and have become one of the dominant groups of healthcare providers of inpatient care in North American hospitals (Kuo & Goodwin, 2011). Patients who are defined as unattached or who have primary physicians who do not

Downloaded on 03-29-2024. Single-user license only. Copyright 2024 by the Oncology Nursing Society. For permission to post online, reprint, adapt, or reuse, please email pubpermissions@ons.org. ONS reserves all rights.