Assessment of Neutropenia-Related Quality of Life in a Clinical Setting

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Purpose/Objectives: To examine how neutropenia affects quality of life (QOL) and explore strategies to assess neutropenia-related QOL in clinical practice.

Data Sources: Published articles, abstracts, conference proceedings, and clinical practice guidelines.

Data Synthesis: Neutropenia can have a detrimental effect on the QOL of patients receiving chemotherapy. A neutropenia-related QOL questionnaire can help nurses better identify patients at risk for developing neutropenia and monitor patients who already have it. In some cases, the questionnaire may be the first step in the initiation of interventions to improve patient care. Ideally, the QOL questionnaire should be easy to use, provide clinically meaningful information, and be easily adapted from existing QOL measurement tools.

Conclusions: Effective implementation of QOL assessments into clinical practice can lead to the initiation of interventions that may improve neutropenia-related QOL in patients with cancer receiving chemotherapy.

Implications for Nursing: Nurses can enhance their clinical judgment and affect patient treatment by implementing a questionnaire that assesses patients’ neutropenia-related QOL.

Key Points . . .

➤ Because the development of neutropenia and its associated reduction in quality of life (QOL) can affect treatment outcomes in patients with cancer receiving chemotherapy, healthcare professionals should assess such patients’ QOL before the initiation of therapy and periodically throughout treatment.

➤ Several QOL measurement tools are available and widely used in research, but they may not be suitable for clinical practice.

➤ Customizing QOL measurement tools can make them more user friendly, practice specific, and clinically useful.

➤ Implementation of a QOL screening questionnaire for neutropenia could help nurses identify at-risk patients and guide interventions that could have a positive influence on patients’ treatments.

Neutropenia (grade 3/4, absolute neutrophil count [ANC] < 1.0 x 10^9/L) is a common and serious side effect of myelosuppressive chemotherapy and may lead to febrile neutropenia (ANC < 1.0 x 10^9/L, fever < 38.5°C) and life-threatening infections (Cancer Therapy Evaluation Program, 2003; Daniel & Crawford, 2006). Furthermore, chemotherapy-induced neutropenia frequently compromises the delivery of chemotherapy at full dose and on schedule (Piccizzi et al., 2001). Delivery of suboptimal doses of chemotherapy may compromise long-term survival in potentially curative settings, such as early-stage breast cancer and non-Hodgkin lymphoma (Bonadonna et al., 2005; Epelbaum, Haim, Ben-Shahar, Ron, & Cohen, 1988; Kwak, Halpern, Olshen, & Horning, 1990). Studies also have shown that alterations in chemotherapy regimens may worsen treatment outcomes in patient populations in which treatment is less commonly curative, such as small cell lung cancer (Crawford, 2004). Although the benefits of myelosuppressive chemotherapy often outweigh the threats posed by neutropenia-related consequences, treatments can decrease the risk of neutropenia (Daniel & Crawford). Precautionary measures to reduce the

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