Neutropenia: State of the Knowledge Part I

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Key Points...

Chemotherapy-induced neutropenia (CIN) is the most common dose-limiting toxicity of cancer therapy.

Clinical practice guidelines and validated risk assessment models are available for use in evaluating patients for complications related to CIN.

Complications of CIN include infection, the need for hospitalization, and death.

Neutropenia is the most common dose-limiting toxicity of cancer chemotherapy, and complications from chemotherapy-induced neutropenia (CIN) can cause significant morbidity and mortality. In fact, Given and Sherwood (2005) identified CIN as a nursing-sensitive patient outcome symptom. Expert nursing assessment, intervention, education, and evaluation facilitate patient management of CIN.

At the 2004 Oncology Nursing Society (ONS) Town Hall meeting, the Neutropenia Special Interest Group requested direction from ONS regarding CIN nursing care and management. The Society responded by appointing a project leader to develop the State of the Knowledge on Neutropenia Symposium. Project team members were chosen for their oncology nursing expertise in neutropenia. The team developed a roster of experts in neutropenia, including those knowledgeable in prevention and management in both inpatient and community settings, clinical outcomes, risk management, infection and infection control, translational research, nursing education, research, and health policy.

The project team conducted an extensive review and summary of neutropenia literature, guidelines, and meta-analyses and reviewed current National Institutes of Health— and ONS-funded studies. The panel of experts was invited to participate in a two-day symposium held in January 2006 in Pittsburgh, PA, during which they presented their respective areas of expertise to the project team (see inset). The expert presentations were recorded and transcribed for use in the preparation of this article.

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