MICHIGAN STATE UNIVERSITY | College of Nursing

Care of the Adult Patient with Chemotherapy-Induced Febrile Neutropenia

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Introduction

Neutropenia is a common side effect of chemotherapy that increases the risk for systemic infection and death.[1]

Febrile neutropenia (FN) is a medical emergency necessitating rapid assessment and prompt intervention.[2]

Background/Significance

An estimated 60,000 to 100,000 chemotherapy patients are hospitalized for febrile neutropenia annually. [2,3]

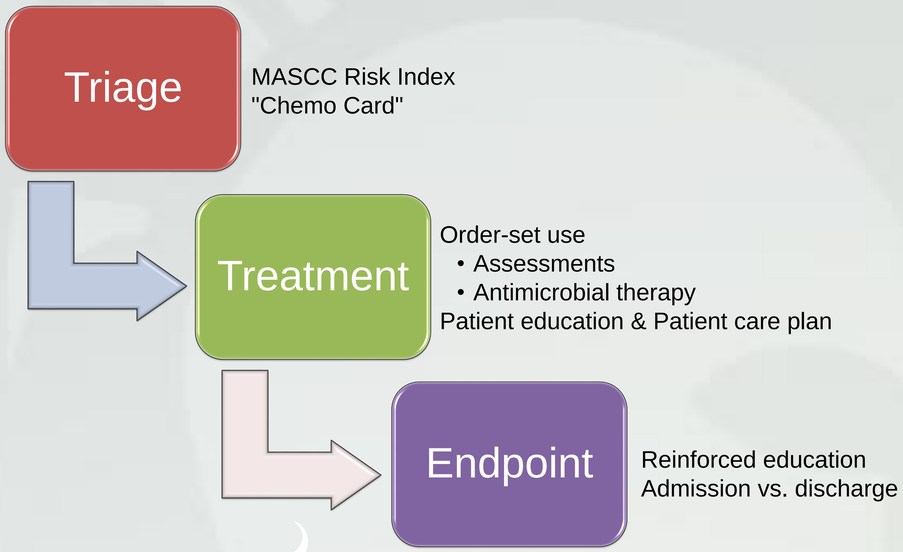
Delays in the initiation of antibiotic therapy for FN are associated with adverse patient outcomes, higher mortality rates, and increased costs related to increased length of stay.[3]

Operationalizing clinical practice guidelines (CPGs) in the treatment of FN promotes superior patient outcomes.[4]

Clinical Question

Does the implementation of an evidence-based, clinical pathway for adult febrile neutropenic patients receiving cytotoxic chemotherapy, result in improved patient outcomes compared to the current variable practices for treating febrile neutropenia?

Clinical Pathway



Chemo Card

CHEMO CARD

This may be an oncologic emergency

- If fever of 100.4°F or higher
  - Phone the triage nurse as (517) 364-XXXX
  - After hours: proceed to nearest emergency department and present this card
- Keep this card with you at all times

Chemo date	Drug(s)

- **My Oncologist is:** _____
- **Antibiotics within 1 hour of presentation**
- **No NSAIDs**

* Design influenced by the London Health Sciences Centre (2014). [7]

Synthesis of Evidence

Targeted staff and patient education promotes earlier identification of FN and supports treatment adherence to CPGs.[5]

Adherence to CPGs has been associated with lower mortality rates in adult patients with FN.[4]

Using order-sets has significantly reduced time from triage to antibiotic therapy in the treatment of FN.[6]

Implications

Future research must seek to methodically examine the processes underlying the treatment of this population in the emergency department.

Improving patient outcomes for this population hinges on the success of randomized controlled trials and multisite trials specific to this patient population.

Establishing and operationalizing interdisciplinary teams between care settings may promote continuity of care.

References

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