Parameter
Mean Age of Patients

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Compliance With Clinical Protocols for Treating Febrile Neutropenia in Hematopoietic Stem Cell Transplant Recipients: Do Healthcare Practices in Low- and Middle-Income Countries Align With the Guidelines Set Forth by IDSA and NCCN?

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INTRODUCTION

Severe infections and febrile neutropenia (FN) due to the administration of conditioning regimens are common among patients undergoing bone marrow transplantation or hematopoietic stem cell transplantation (HSCT). Compliance with the standard antibiotics guidelines of the Infectious Diseases Society of America (IDSA) and National Comprehensive Cancer Network (NCCN) in these patients is crucial to minimize the risk of prolonged hospital stay, antibiotic resistance, increased pharmacoeconomic burden, morbidity, and mortality.

AIM

This study aimed to evaluate compliance with the FN clinical guidelines among patients undergoing HSCT

Method

- This prospective, observational study was single-centered and was conducted for 3 months at a well-known institute that specializes in treating blood disorders and bone marrow transplantation. The recruited participants for inclusion criteria were those who had at least a single episode of FN after HSCT. Antibiotics clinical guidelines compliance provided by IDSA and NCCN for FN treatment were assessed while reviewing patients' medical profiles.

RESULTS

The mean age of the patients was 15.09 years ± 6.57. A total of 23 patients with 29 episodes of FN were assessed. FN therapy with compliance-based guidelines (IDSA, NCCN) was examined in terms of selection, initial regimens, and timing of antibiotics. Unfortunately, 63% of recruited patients did not adhere to the IDSA and NCCN guidelines recommendations for initial regimen modification and antibiotic dosing, and only 27% of patients received therapy as per the guidelines.

Table 1: Patient Demographics and Study Overview

Parameter	Value
Mean Age of Patients	15.09 years ± 6.57
Total Number of Patients	23
Total Episodes of Febrile Neutropenia (FN)	29

Table 2: Compliance with Clinical Guidelines

Guideline Aspect	Findings
Adherence to IDSA and NCCN Guidelines	27% of patients received therapy as per guidelines
Noncompliance Rate	63% of patients did not adhere to guidelines
Specific Areas of Noncompliance	Use of vancomycin and initial regimen modification

CONCLUSIONS

Significant noncompliance to the clinical guidelines was determined, specifically in the use of vancomycin and initial regimen modification, which affected patient outcomes and hospital stay. Conducting sessions to review IDSA and NCCN guidelines is essential for increasing healthcare professionals' awareness and encouraging the judicious utilization of antimicrobial agents.

REFERENCES

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