The Outcome of Critically Ill Pediatric Cancer Patients Admitted to the Pediatric Intensive Care Unit in a Tertiary University Oncology Center in a Developing Country: A 5-Year Experience.

Amany M Ali, Heba A Sayed, Mahmoud M Mohammed

Abstract:

Cancer remains a major cause of death in children, but recent advances in supportive care and progress in the use of chemotherapy have considerably improved the prognosis. The need for intensive care management in pediatric oncology patients is increasing. However, studies demonstrating their outcome in the literature are still deficient, especially in developing countries. Here, we aim to report our experience in managing patients admitted to the pediatric intensive care unit (PICU) at South Egypt Cancer Institute, a tertiary university oncology center in a developing country. A review of all cancer patients admitted to the PICU at South Egypt Cancer Institute between January 2007 and December 2011 and an evaluation of prognostic factors that may correlate to their short-term outcome were performed. A total of 550 pediatric oncology patients were admitted to the PICU on 757 occasions. Hematological malignancies represented 73.6% of the cases. The median duration of PICU stay was 5 days. Sepsis and respiratory failure were the most frequent indications for PICU admission. The overall survival at the time of discharge from the PICU was 60%. Several factors were found to significantly affect the outcome of patients admitted to the PICU, including the underlying disease, the reason for admission, the intervention used, and the number of failing organs at the time of admission to the PICU. The prognosis of patients admitted to the PICU in developing countries is still behind those in developed ones. Late referral, especially of patients presenting with respiratory failure, sepsis, and multiorgan failure usually, requires urgent intervention with inotropic support, oxygen therapy, and mechanical ventilation and is significantly associated with poor outcomes, especially in patients with hematological malignancies.

Published In:

Journal of pediatric hematology/oncology, Vol.38, No.5, PP.355-359