

Children with pulmonary complications post bone marrow transplantation: Is lung transplantation a second opportunity?

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BMT has become a life-saving treatment modality for a variety of hematologic, genetic, and neoplastic disorders in children. As survival has improved, the development of delayed adverse effects in long-term survivors has become more prominent. These include infectious, non-infectious complications, and secondary cancers. Pulmonary complications account for significant morbidity and mortality in patients following BMT, occurring in 70% and are a factor in more than 30% of transplant-related deaths. Despite the high rate of pulmonary complications and associated mortality in BMT recipients, the number of these patients who proceed to lung transplant (LTx) remains exceptionally small.

We reviewed a multicenter experience of pediatric LTx post-BMT describing the clinical outcome and survival comparing these results with a group of pediatric patients who received lung transplants for indications other than post-BMT lung disease. The long-term follow-up did not show an overall significantly higher mortality in lung transplant recipients following BMT compared to recipients of LTx for Cystic Fibrosis; the most common indication for LTx in this age group. Our cases had a higher infection rate, which may relate to the chronic use of immunosuppression prior to LTx. Acute rejection episodes were significantly higher in the control group with a median of one episode per patient in the control group compared to none within the cases. We conclude that LTx offers a valuable therapeutic option for patients with respiratory failure following BMT.

Biography

Shatha Yousef, MD has completed her Medical School from Jordan University of Science and Technology, Pediatric residency at Michigan State University, and Pulmonary fellowship at University of Miami. She is the Associate Director of the cystic fibrosis program and the division's delegate to the cancer survivor clinic at University of Miami.

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