

Title: The pediatric oncology experience at Hospital Israelita Albert Einstein.

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Background: Pediatric cancer is a heterogeneous group of diseases with remarkable advances in knowledge and treatment over the last decades. Although a rare disorder, it is the most common cause of disease related death in children living in developed countries. Unfortunately, the improvement in the outcome for children with cancer is not translated cross Brazil and cure rates may vary significantly according to different regions. In the state of Sao Paulo, most of pediatric cancer patients are treated in specialized pediatric centers, mainly public funded, based on research and cooperative trials, with outcomes compared to literature. There are few Brazilian pediatric oncology programs reported in private institutions.

Hypothesis: To describe the characteristics and outcomes of patients treated for pediatric cancer at Hospital Israelita Albert Einstein after the pediatric cancer program was established in 2006.

Methods: A retrospective analysis was conducted in all patients admitted to the pediatric oncology program at the Hospital Israelita Albert Einstein, from July 2006 to May 2015. Data collected included demographic data, diagnosis, staging, therapeutic protocol, disease relapse and outcome. Patients with benign hematological disorders and immunodeficiency were excluded from this analysis.

Results: Of 110 patients with pediatric cancer identified, 100 were new diagnosis and 10 patients were referred for either second opinion or to continue on therapy. Near half of these patients were admitted in the past 3 years. The most common diagnosis was Acute Lymphoblastic Leukemia (33) followed by Brain Tumors (16), Neuroblastoma (11), Acute Myelogenous Leukemia (9) and Renal tumors (7). Other diagnosis included: Post Transplant Lymphoproliferative Disorder, Ewing sarcoma, Osteosarcoma, Rhabdomyosarcoma, Germ Cell Tumor, Chronic Leukemia, Juvenile Myelomonocytic Leukemia, Myelodysplastic Syndrome, Polycythemia vera, Fibrosarcoma and Nasopharyngeal carcinoma. The median age of the group was 7.09 years (0.22 – 34.05 years), with a male/female ratio 1:1.34. Lost of follow up occurred in 8 patients and bone marrow transplant was performed in 21 patients (11 allogeneic and 10 autologous hematopoietic stem cell transplantation).

The reported overall survival on 100 newly diagnosed patients was 78%.

Despite a small number of patients, the good overall survival is compared to developed countries and reassures the therapeutic approach. This analysis encourages further steps to continue developing the pediatric oncology program at Hospital Israelita Albert Einstein, including education and research through collaboration and beyond the borders of a single institution.