from his MSD. He had primer engraftment failure with aplasic bone marrow. The other was 12-year-old boy, underwent BU-Cy based allogenic HSCT from his MSD. He had severe GIS GVHD and prolonged isolated thrombocytopenia. **Conclusion:** Despite busulfan based conditionings used to be more common approach in pediatric patients underwent allogenic HSCT for TDT, treosulfan-based conditioning is gaining acceptance. Our retrospective study confirms the efficiacy and safety of both agents. Treosulfan, fludarabine and thiotepa seem to be appropriate for minimizing the risk of complications, particularly for VOD.

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OP 25

EFFECT OF GRAFT VERSUS HOST DISEASE PROPHYLAXIS ON THE LEUKEMIA FREE SURVIVAL IN PEDIATRIC PATIENTS WHO HEMATOPOETIC STEM CELL TRANSPLANTED FOR LEUKEMIA

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Objective: Hematopoietic stem cell transplantation (HSCT) is an important treatment modality for leukemia, the most common childhood malignancy. Graft versus host disease, one of the most important complication of transplantation, is the most important cause of morbidity and mortality. In our study, we aimed to show the effect of methotrexate doses given in transplants due to leukemia, the development of acute or chronic GVHD, on leukemia-free survival. **Methodology:** Patients who underwent HSCT due to leukemia, between April 2010-October 2020 at a pediatric transplantation unit were included in the study. Methotrexate doses given to patients; were grouped as 10mg/m^2 on day 1,3,6; 10mg/m^2 on day 1,3, 5mg/m^2 on day 6; 10mg/m^2 on day 1, 3; 10mg/m^2 on day 1 and 5 mg/m^2 on day 3,6; 10 mg/m^2 on day 1 and also 5 mg/m^2 on day 1. The effects of these groups on event-free and overall survival were evaluated. **Results:** Recurrence was not observed in 72 of 93 patients evaluated in the ALL group (77.4%). The conditioning regimens were considered TBI-Busulfan-based regimens. No significant difference was observed in terms of LFS. The absence of aGVHD in the ALL patient group significantly prolongs LFS, when evaluated according to CR1-2-3 groups, CR2 significantly extended the LFS time. Effect of GVHD prophylaxis on LFS was evaluated no significant effect of methotrexate dose on LFS was observed. **Conclusion:** The most important factor affecting leukemia-free survival is the state of remission. The longest duration of LFS was detected in CR1. The effect of methotrexate dose as GVHD prophylaxis has not been determined. There was no consensus in the studies on methotrexate doses in the literature. It is necessary to study with a larger cohort.

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Pediatric Oncology Abstract Categories

Rare Tumours and Histiocytosis

OP 26

LANGERHANS CELL HISTIOCYTOSIS IN TURKISH CHILDREN; 30 YEARS OF EXPERIENCE FROM A SINGLE CENTER

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Objective: Langerhans-Cell Histiocytosis, the most common histiocytic disorder, is characterized by inflammatory lesions with infiltrating CD1a+/CD207+ pathologic dendritic cells. The extent of disease is highly variable, from single lesion disease to life-threatening disseminated multisystem disease. We aimed to determine the demographic characteristics and the clinical outcomes of children with LCH. **Methodology:** The files of 81 patients diagnosed with LCH in Ankara Oncology Hospital, Dışkapı Children's Hospital and Ankara City Hospital between 1993 and 2023 were retrospectively analyzed. Data collected from the files included characteristics, age, sex, symptoms, physical examination findings, site of involvement, laboratory findings at diagnosis, procedure applied, treatment type used, and outcome. **Results:** The median age was 5 (0.1-17) with a median follow-up of 3 years (0.1-14) (Table1). The most common complaint was a bone lesion-related symptom; swelling (31%), pain (19%). Surgery was the only treatment in 19, chemotherapy in 22, radiotherapy in 1, surgery + chemotherapy in 35 (43%). Vinblastine + prednisolone was most commonly (36%) used. A patient with BRAF600VE was treated with vemurafenib. Recurrence was detected in 13 (16%) patients. Three patients died (3.7%) with refractory disease. **Conclusion:** Bone and skin were the most frequently involved systems in our study. Prognostic factors affecting event-free survival (EFS) were multisystem disease (5-year EFS 62% versus 87%, p=0.01) and hematologic system involvement (5-year EFS 42% versus 82%, p=0.02). Consistent with the literature, our overall survival (OS) rate was found to be high (5-year OS 95%). Patients with single-system disease had excellent survival (100%).

	No (n=81)	%
Median age at diagnosis (range)	5 (0,1-17 years)	
Age distribution		
≤24 ay	22	27
>24 ay	59	73
Sex		
Male	55	68
Female	26	32
Staging		
Single-system disease	57	70
Multisystem disease	24	30
Sites of involvement		
Bone isolated	38	47