



Article

Relationship of Post-Transplant Lymphoproliferative Disorders (PTLD) Subtypes and Clinical Outcome in Pediatric Heart Transplant Recipients: A Retrospective Single Institutional Analysis/Experience of 558 Patients

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Simple Summary: Post-transplant lymphoproliferative disorders (PTLD) are heterogenous lymphoproliferative disorders that develop in immunosuppressed transplant recipients. We performed a retrospective review of PTLD occurring in pediatric heart transplant recipients and sought to determine the correlation of PTLD subtypes with different characteristics. Our single institution retrospective study found that compared to older children, infant heart transplant recipients were less likely to develop PTLD. Infant heart transplant recipients who developed PTLD were diagnosed later than older children and had a lower rate of more aggressive PTLD. The overall survival of patients with more aggressive PTLD was significantly lower than patients with low-grade PTLD. Proper classification of the type of PTLD is important, as the subtypes of PTLD showed a significant correlation with the outcome.

Abstract: Post-transplant lymphoproliferative disorders (PTLD) are heterogenous lymphoproliferative disorders that develop as a consequence of immunesuppression in transplant recipients. We sought to determine if subtypes of PTLD correlated with different outcomes. We performed a retrospective review of PTLD occurring in pediatric heart transplant recipients. A total of 558 children and infants underwent cardiac transplantation at our institution between 1985 and 2019 and were followed until March 2021. Forty-nine of 558 patients developed PTLD (8.8%). As compared to older children (2-one year of age), infant recipients (4three months of age) were less likely to develop PTLD. Monomorphic PTLDs (M-PTLD, 61%) was the most common subtype at initial diagnosis, followed by non-destructive (21%), polymorphic (14%), and classic Hodgkin lymphoma (cHL, 4%). Patients who underwent transplantation at a young age (4three months) had significantly lower rates of M-PTLD or cHL and a longer time from transplant to PTLD diagnosis as compared to children older than one year at transplant (p = 0.04). Although not reaching statistical significance, patients with a shorter time to PTLD diagnosis showed a trend toward higher rates of M-PTLD or cHL. As expected, the overall survival (OS) of patients with M-PTLD or cHL was significantly lower than patients with non-destructive or polymorphic PTLD.



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supplemented by detailed descriptions of the output and role of automated instruments in disorders of the blood Morphology of Blood Disorders 2nd edition is an essential reference source for diagnosis in the haematology laboratory designed to be the go to guide for anyone with an interest in blood cell morphology **Hematopathology, An Issue of Surgical**Pathology Clinics, E-Book Aliyah R. Sohani,2023-05-09 In this issue guest editors bring their considerable expertise to this important topic Contains 15 practice oriented topics including new entities and challenges in pediatric hematopathology IgG4 related lymphadenopathy and lymphoproliferative disorders the changing landscape of follicular lymphoma new variants and related entities breast implant associated lymphomas controversies in splenic histiocytic dendritic and stromal cell lesions and more Provides in depth clinical reviews on hematopathology offering actionable insights for clinical practice Presents the latest information on this timely focused topic under the leadership of experienced editors in the field Authors synthesize and distill the latest research and practice guidelines to create clinically significant topic based reviews

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the biomedical sciences Much of the progress in this area has developed directly as a result of new morphology based methods that have permitted the assessment of chemical enzymatic immunological and molecular parameters at the cellular and tissue levels Additional novel approaches including laser capture microdissection have also emerged for the acquisition of homogeneous cell popula tions for molecular analyses These methodologies have literally reshaped the approaches to fundamental biological questions and have also had a major impact in the area of diagnostic pathology Much of the groundwork for the development of morphological methods was estab th lished in the early part of the 19 century by Francois Vincent Raspail generally acknowledged as the founder of the science of histochemistry. The earliest work in the field was primarily in the hands of botanists and many of the approaches to the under standing of the chemical composition of cells and tissues involved techniques such as microincineration which destroyed structural integrity The development of aniline th dyes in the early 20 century served as a major impetus to studies of the structural rather than chemical composition of tissue Later in the century however the focus returned to the identification of chemical constituents in the context of intact cell and tissue structure Hematopathology E-Book Elaine Sarkin Jaffe, Daniel A. Arber, Elias Campo, Leticia Quintanilla-Fend, Attilio Orazi, 2016-06-27 The world's leading reference in hematopathology returns with this completely updated second edition Authored by international experts in the field it covers a broad range of hematologic disorders both benign and malignant with information on the pathogenesis clinical and pathologic diagnosis and treatment for each Comprehensive in scope it's a must have resource for both residents and practicing pathologists alike Authored by the chief architects of the WHO classification in neoplasms of hematopoietic and lymphoid tissue Covers the newest diagnostic techniques including molecular immunohistochemical and genetic studies Confirm or challenge your diagnostic interpretations by comparing specimens to over 1 000 high quality color images Boasts detailed practical advice from world leaders in hematopathology Places an emphasis on pathologic diagnoses including molecular and genetic testing Updated with the most current WHO classifications of hematologic disease including lymphoma and leukemia and peripheral T cell lymphomas Covers hot topics in hematopathology such as the latest genetic insights into lymphoma and leukemia the new nomenclature for myelodysplastic syndromes new developments on the subject of Grey zone lymphoma and much more Expert Consult eBook version included with purchase This enhanced eBook experience allows you to search all of the text figures images and references from the book on a variety of devices There s also a downloadable image bank and Virtual Microscope Slides are featured in several chapters Proceedings, 1997 Thomas' Hematopoietic Cell **Transplantation** Karl G. Blume, Stephen J. Forman, Frederick R. Appelbaum, 2008-04-15 NEW the leading book in its field now fully updated andrevised Click here to access two FREE sample chapters An Essential resource for all hematologists oncologists pathologists pediatricians immunologists and all othersinterested in this dynamic area of medicine Why you should buy this book Extensive coverage of subject area from the scientific basisto the view of the future Includes all

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