

Chronic graft-versus-host disease in children and adolescents

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Abstract

Chronic graft-versus-host disease (cGVHD) remains the major late complication of hematopoietic stem cell transplantation (HSCT) and is the main cause of non-relapse mortality (NRM) and morbidity in the long-term follow up. Reported pediatric incidence rates range from 23%–40%, with rising numbers as a result of the increasing use of peripheral blood stem cells, mismatched donors, and adoptive cellular therapies. Compared to adults, considerable fewer studies have been performed in children due to the lower number of patients and because reported data are very heterogeneous. Both cGVHD and therapy may have a profound deleterious impact on organ functions and organ development, hormone balance, and psychomotoric development of the growing child.

Here, we summarize pediatric aspects of risk factors, clinical presentation, and treatment options including supportive and topical therapy. The recently recommended standards for diagnosis and staging are also briefly described. The early identification of high-risk patients, perception of multisystem comorbidities, and exact response evaluation may lead to individualized management of cGVHD patients.

Keywords: pediatric chronic GVHD, diagnosis, staging, treatment, comorbidities, response evaluation