Consensus Conference on Clinical Practice in Chronic Graft-versus-Host Disease (GVHD): First-Line and Topical Treatment of Chronic GVHD

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Chronic graft-versus-host disease (cGVHD) after allogeneic hematopoietic stem cell transplantation is still associated with significant morbidity and mortality. First-line treatment of cGVHD is based on steroids of 1 mg/kg/day of prednisone. The role of calcineurin inhibitors remains controversial, especially in patients with low risk for mortality (normal platelet counts), whereas patients with low platelets at diagnosis and/or high risk for steroid toxicity may be treated upfront with the combination of prednisone and a calcineurin inhibitor. Additional systemic immunosuppressive agents, like thalidomide, mycophenolic acid, and azathioprine, failed to improve treatment results in the primary treatment of cGVHD and are in part associated with higher morbidity, and in the case of azathioprine, with higher mortality. Despite advances in diagnosis of cGVHD as well as supportive care, half of the patients fail to achieve a long-lasting response to first-line treatment, and infectious morbidity continues to be significant. Therefore, immunomodulatory interventions with low infectious morbidity and mortality such as photopheresis need urgent evaluation in clinical trials. Beside systemic immunosuppression, the use of topical immunosuppressive interventions may improve local response rates and may be used as the only treatment in mild localized organ manifestations of cGVHD.

KEY WORDS: Allogeneic hematopoietic stem cell transplantation, Graft-versus-host disease, Immunosuppressive therapy

INTRODUCTION

Chronic graft-versus-host disease (cGVHD) continues to be associated with significant morbidity and mortality. First-line treatment of cGVHD is based on steroids of 1 mg/kg/day of prednisone. The role of calcineurin inhibitors remains controversial, especially in patients with low risk for mortality (normal platelet counts), whereas patients with low platelets at diagnosis and/or high risk for steroid toxicity may be treated upfront with the combination of prednisone and a calcineurin inhibitor. Additional systemic immunosuppressive agents, like thalidomide, mycophenolic acid, and azathioprine, failed to improve treatment results in the primary treatment of cGVHD and are in part associated with higher morbidity, and in the case of azathioprine, with higher mortality. Despite advances in diagnosis of cGVHD as well as supportive care, half of the patients fail to achieve a long-lasting response to first-line treatment, and infectious morbidity continues to be significant. Therefore, immunomodulatory interventions with low infectious morbidity and mortality such as photopheresis need urgent evaluation in clinical trials. Beside systemic immunosuppression, the use of topical immunosuppressive interventions may improve local response rates and may be used as the only treatment in mild localized organ manifestations of cGVHD.