

many of the side effects previously discussed occur in the child undergoing BMT.

The most common complication in allogeneic transplants is acute GVHD, which can affect the skin, gastrointestinal tract, and liver. The characteristics and severity of the manifestations vary according to the severity and area affected. Emphasis is now placed on the prevention of GVHD, using various agents such as a calcineurin inhibitor in conjunction with mycophenolate mofetil, methotrexate, or sirolimus ([Gottschalk, Naik, Hegde, et al, 2016](#)). Treatment involves the use of steroids or other immunosuppressive medications. However, this treatment further increases the risk of infection in the already susceptible patient. All blood products should be irradiated to minimize the introduction of additional antigens.

Skin breakdown and delayed wound healing frequently occur in the patient undergoing BMT. Preventive interventions to minimize pressure on dependent areas of the skin include the use of pressure-relieving or pressure-reducing beds or mattresses and frequent activity. Measures to promote healing when breakdown occurs include frequent sitz baths to the perianal area and protective skin barriers, such as hydrocolloid dressings or occlusive ointments.

Throughout this long ordeal the family is worried about successful engraftment and fatal complications. An unfortunate post-transplant possibility is recurrence of the disease after engraftment. Consequently, nurses need to provide sensitive care and maintain a supportive attitude during the many crises that may arise. If the procedure is not successful, the care needed by these families is consistent with that required by the family of any child with a life-threatening disorder (see [Chapter 17](#)).

Preparation for Procedures

Children in particular need psychological preparation for the various treatment modalities, which often involve surgery, IV injections, bone marrow aspiration, and LP. The diagnostic procedures initially employed to confirm the diagnosis and those that are repeated to monitor treatment can be a source of discomfort and stress to the child and family. Even noninvasive procedures such as imaging and radiologic tests are frightening to a young