

Graft versus Host Disease (GVHD) is a rare disorder that can strike persons whose immune system is deficient or suppressed and who have received a bone marrow transplant or a nonirradiated blood transfusion. Symptoms may include skin rash, intestinal problems and liver dysfunction. GVHD is caused by donor T cells recognizing foreign antigens (histocompatibility or human leucocyte antigens) on the recipient's cells and reacting to them. Prior to allogeneic bone marrow transplants recipients usually undergo myeloablative treatment with radiation or chemotherapy to destroy their own diseased bone marrow and weaken their immune system. When receiving the bone marrow or stem cell transplant, immunocompetent donor lymphocytes recognize foreign minor locus histocompatibility antigens on the recipient's cells resulting in GVHD. GVHD affects males and females of all ages who have been immunosuppressed before being given a bone marrow transplant or a nonirradiated blood transfusion containing allogeneic lymphocytes. The risk of GVHD usually increases with the recipient's age and with the degree of HLA differences between donor and recipient unless fully T-cell depleted.