



Laboratory Service Manual

Transfusion Services

MANAGING PATIENTS WITH HIV

No case of TA-GVHD has occurred following acquisition of human immunodeficiency virus (HIV) infection despite the numerous unirradiated transfusions to which patients in this group have been exposed. Since the primary immunodeficiency of acquired immune deficiency syndrome (AIDS) is in the CD4+ cells, it might be postulated that the cytotoxic T cells responsible for host defense against transfusion associated Graft vs. Host Disease (TA-GVHD) remain intact. The CD8+ cells, as opposed to the CD4+ cells, are critical for host defense against TA-GVHD.

Patients with HIV are at significant risk of infection, including that of cytomegalovirus (CMV), a leukocyte-associated virus that may be transmitted by blood components. Numerous studies have examined the efficacy of leukocyte reduction in the prevention of TA-CMV. Children's Transfusion Services provides all red cells and platelets as leukocyte reduced prestorage. Leukocyte reduced red cells and platelets are considered CMV-safe.

Special Transfusion Requirements for Patients with HIV

-- CMV-Safe blood components (red cells and platelets)-required

-- Irradiated blood components-*not* required

References:

Minz, P (1999) Transfusion Therapy, Clinical Principles and Practice, Bethesda, MD: American Association of Blood Banks