Unrelated cord blood transplantation in children with sickle cell disease: review of four-center experience.


Abstract
UCBT was performed in seven children with SCD and stroke (HLA match 4/6 n=5; 5/6 n=2). Four received myeloablative regimens (BU, CY, ATG plus FLU in one patient). One had primary graft failure, three had sustained engraftment, two with grade III-IV GVHD (one died, one developed chronic GVHD), one with stable mixed chimerism. Three patients treated with reduced-intensity regimens (FLU, BU or CY, ATG, TLI) failed to engraft; one engrafted after second UCBT (HU, TT, RXA, ALZ, TBI). Four patients (57%) developed viral infections. Engraftment, GVHD, and infection remain challenges.