

Bharati Vidyapeeth (DU) Medical College, Pune

Department of Immunohematology & Blood Transfusion

THERAPEUTIC LEUKOCYTE DEPLETION

It is a procedure in which leukocytes are selectively removed to prevent various organ damage due to Hyperleukocytosis. The common indications are Leukostasis in AML/ALL and blast crisis in CML. The Department of Immunohematology & Blood Transfusion, Bharati Hospital, has successfully performed the first Therapeutic Leukocyte Depletion on 28 Dec 2023, for a newly diagnosed AML patient with leukocytosis-induced ischemic cardiac changes. The patient had a TLC count of $4,13,000/\text{cmm}^3$ with hyperviscosity symptoms. The procedure was performed on Spectra Optia Apheresis System and was completed in 2.5 hours. There was a drastic reduction in the TLC count (more than 50%) along with significant symptomatic improvement in the patient.

