

Irradiated Blood



Products



PRATHAMA BLOOD CENTRE

AHMEDABAD

Irradiated blood is given to prevent a rare complication of transfusion called Transfusion-Associated Graft-versus Host Disease (TA-GvHD). Gamma-irradiation with a Dose OF 25 gy of blood prevents lymphocytes dividing and causing harm. All granulocyte (white cell) and tissue type matched transfusions are routinely irradiated.



TA-GvHD

TA-GvHD is a fatal complication of blood transfusion caused by white blood cells (Lymphocytes) present transfused blood. These donor lymphocytes proliferate and damage target organs, especially bone marrow, skin, liver and gastrointestinal tract. Typically the condition presents 10-14 days after transfusion with rash (erythroderma), pancytopenia and abnormal liver function. Leukocyte reduction is not sufficient in such cases (TA GvHD). Gama irradiation is only the option.

Patients at risk of TA-GvHD

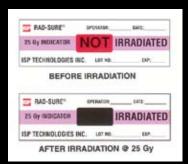
Patients are at particular risk of TA-GvHD includes patients with inherited immune deficiencies and patients with Hodgkin's disease or new born in need of exchange transfusion. Patients who have had an allogenic bone marrow/stem cell transplant should have irradiated blood. The newborn may be at particular risk of TA-GVHD either by immune incompetence or of an underlying congenital T-cell immunodeficiency. Similarly Donations from family members pose a particular risk of TA-GVHD, especially when the recipient is a neonate or even if the patient is immunocompetent.

Indication

- Recipients of Bone marrow & peripheral blood stem cell transplant.
- Children with severe congenital T cell deficiency.
- Fetal transfusion.
- Neonates who received irradiated components as fetus.
- All granulocyte transfusions.
- Recipients of directed donor transfusion from blood relatives.
- Exchange transfusion for hemolytic disease of newborn.
- HLA matched or cross matched platelet transfusion.
- Hodgkin's disease.

Irradiated Blood Products

Red cell (blood), Platelet transfusions and Granulocyte (white cell) transfusions are irradiated for patients. It is important that doctors are aware if their patients need for irradiated blood as they need to order it specially. Plasma products such as Fresh Frozen Plasma, Anti-D, Albumin, and Immunoglobulin need not be irradiated.



Get in touch with:

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