

Efficacy and Safety of Partial Phenotype Matched, Least Incompatible Blood Transfusions.

Transfusion support is must for patients with **Auto Immune Hemolytic Anemia (AIHA)** who present with fulminant hemolysis. The presence of RBC auto-antibodies can make it difficult to detect co-existing allo-antibodies which can cause severe hemolytic transfusion reaction. Transfusion of least incompatible blood is of concern as well. To provide safe transfusion support in such cases remains a challenge.

We at LBC came across 4 cases of AIHA in last 10 days. Auto Control, DAT and IAT results were positive (3+ to 4+)

Hb of patients ranged from 3 to 4 gm%.

Transfusion was an absolute indication in such situations.

After discussion with respective clinicians, we got the go ahead signal from all of them for the phenotyping.

Partial Phenotype, ABO, D, C, E, c, e and K...of the patients was done. **LBC IS HAVING THE REGISTRY OF 2700+ PHENOTYPE DONORS.**

The cross match of phenotype matched units was carried out, and least incompatible cross-matched 18 units were transfused. No hemolytic transfusion reaction is being reported.

THE STRATEGY OF PARTIAL PHENOTYPE MATCHED BLOOD FOR TRANSFUSION SUPPORT IN AIHA CASES SEEMS TO BE BENEFICIAL AS WELL AS SAFE.

LBC is still increasing phenotype donors registry to meet various transfusion challenges for the benefit of the patients.

ALL THIS IS POSSIBLE BECAUSE OF THE SUPPORT OF BLOOD DONORS, INFLUENTIAL DONORS AND GUIDANCE OF CLINICIANS.

Product	WBC count in the product	Price
WB (Whole Blood)	5×10^9	REGULAR
RCC (Red Cell Concentrate)	5×10^9	REGULAR
LR RCC (Leuco-reduced RCC) Buffy-Coat removed	$<5 \times 10^8$	REGULAR + Rs. 150
LD RCC (Leuco-depleted RCC) (using lab side leucodepletion filter)	$<5 \times 10^6$	REGULAR + Rs. 1000

Advantages:

a) LR RCC:

- Reduced frequency and severity of FNHTRs (Febrile Non-Hemolytic transfusion reactions)

b) LD RCC:

- Reduced risk of CMV (Cytomegalovirus) transmission.
- Reduced risk of HLA (Human Leukocyte Antigen) allo-immunization and platelet refractoriness
- Reduced infection risk associated with immunomodulation (TRIM)
- Reduced organ dysfunction and mortality
- Reduced direct risk of transfusion transmissible bacteria

NAT & X-Ray Irradiated blood units available at Life Blood Centre.

Dr. Varsha Sorathiya

Blood Transfusion Officer

lbc.bto@999life.org

99987 24121

Dr. Sanjiv Nandani

Medical Director

lbc@999life.org

98253 14831

Meetal Koticha Shah

Joint Executive Trustee

savelife@999life.org

Life Blood Centre

(Formerly known as Rajkot Voluntary Blood Bank & Research Centre)

(NABH Accredited Regional Blood Transfusion Centre)

Smt. Sushilaben Ramniklal Mehta Bhavan

24, Vijay Plot, Malaviya Road, Rajkot - 360 002, Gujarat, India.

☎ (+91-281) 223 42 42 / 43 📠 +91 85 11 22 11 22

✉ lbc@999life.org 🌐 www.lifebloodcentre.org

