

'INVISIBLE THREATS': ANALYZING THE PREVALENCE OF RED CELL ALLOIMMUNIZATION IN TERTIARY CARE CENTRE

eP085

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BACKGROUND

Alloimmunization to red blood cell (RBC) antigens is caused by exposure to the red cell antigens either through transfusion or pregnancy. Clinically significant alloantibodies can lead to serious transfusion reactions or haemolytic disease of the newborn.

AIMS & OBJECTIVES

- 1) To estimate the prevalence of red cell alloantibodies in various patients.
- 2) To ensure safe transfusion and to optimize compatibility testing.

METHODS

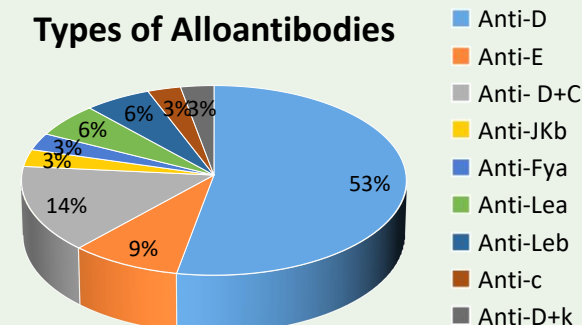
The prospective study conducted in department of Transfusion Medicine over a period of six months (January 2024 to June 2024). Antibody screening was carried out in patients with a commercially available three-cell panel by the column Agglutination technique. Antibody screening-positive samples were further tested for antibody identification.

REFERENCES : Evers D, Middelburg RA, de Haas M, et al. Red-blood-cell alloimmunisation in relation to antigens' exposure and their immunogenicity: a cohort study. Hendrickson JE, Tormey CA. Red blood cell antibodies in hematology/oncology patients: interpretation of immunohematologic tests and clinical significance of detected antibodies.

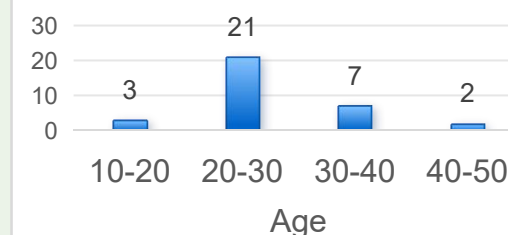
Results

Out of **185** samples tested, alloantibodies identified were

Types of Alloantibodies



Age wise distribution



CONCLUSION

Phenotypically matched antigen-negative crossmatch-compatible blood was transfused if the antibody was clinically significant, whereas for clinically insignificant antibodies, crossmatch-compatible blood at anti-human globulin phase was issued for transfusion.