

INTRODUCTION

- Autoimmune hemolytic anemias (AIHAs) are rare and heterogeneous disorders characterized by the destruction of red blood cells through autoantibodies leading to anemia that ranges from no symptoms to severe life-threatening hemolysis.
- AIHA is categorized based on temperature sensitivity into warm, cold, and mixed types.
- The autoantibodies involved can be IgG, IgM, IgA, or complement proteins, and the hemolysis may occur either intravascularly or extravascularly.

AIM

- To evaluate the serological characteristics and transfusion management in patients clinically suspected of autoimmune hemolytic anemia (AIHA).

METHODS

Jan 2019 – sept 2024

Blood grouping and typing

DCT and ICT

Monospecific DAT

Alloantibody identification

Haematological and biochemical data

Number of blood transfusions

RESULTS

Patient details(n=130)	Total(%)
Age distribution(years)	
<15	31(23.8)
16-45	74(56.9)
>46	25(19.2)
Type of AIHA	
Primary	94(72.3)
Secondary	36(27.6)
Gender distribution	
Females	95(73.0)
males	35(26.9)

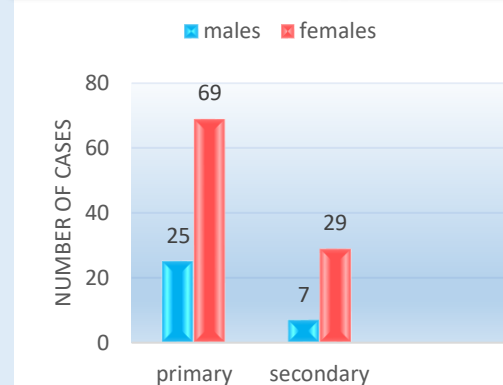


Fig1. Gender distribution in primary and secondary AIHA

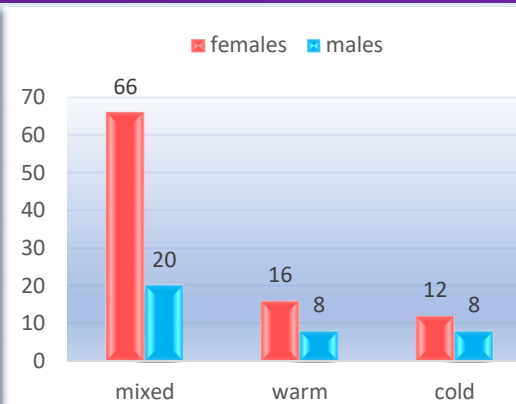


Fig2. Gender distribution in mixed, warm and cold AIHA

Immunohematological workup	Total(%)
DCT subtype	
IgG only	24(18.4)
C3d only	05(3.84)
IgG+C3d	29(22.3)
IgG,IgM,C3d	14(10.7)
IgG,IgM,IgA,C3d,C3c	16(12.3)
AIHA type according to the nature of antibody	
Mixed	86(66)
Warm	24(18)
cold	20(15)

Grouping discrepancy

Warm(5)

Cold(11)

Mixed (57)

Parameter	PRE	POST
Hb(gm/dl)	5.8	6.9
RC%	7.8	7.1
TSB(mg/dl)	3.2	3.8
LDH(U/L)	820	853

CONCLUSION

- Mixed AIHA is the most prevalent form.
- Significant number of patients had grouping discrepancies highlighting the importance of thorough immunohematological evaluations.
- Transfusion even with least incompatible units were safe and effective.