

A Case Report of Blood Group Discrepancy because of Anti A₁ with Clinical Significance and Anti C

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Abstract

Background and objectives: ABO phenotyping is one of the essential tests in Immunohematology. Incompatible blood group transfusion leads to acute hemolysis reactions and other serious complications. Anti A₁ is a cold Antibody with no clinical significance, but if it is reacted at 37^{°C} can be clinically significant, which will be happened rarely. At the present, we report a Case with anti A₁ having clinical significance and Anti C.

Material and methods: The patient was suffering from Paroxysmal nocturnal hemoglobinuria (PNH) and received repeated blood transfusion. The tests performed for this patient were blood grouping, Antibody screening, panel test and cross match.

Result: the patient's blood group is AB (A₂B) with anti A₁. The presence of anti C is verified by applying Panel test.

Conclusion: to prepare appropriate blood, Cross mach test was performed on A₂B blood bags without C Antigen. During laboratory tests and blood transfusion, no reaction was observed. This report indicates that being aware of anti-antigen antibodies is an important point.

Key words: Anti C and Anti A₁ with Clinical importance, PNH, Ab Screening