

## INTERPRETATION AND TRANSFUSION PLANNING IN ALLOGENEIC BONE MARROW TRANSPLANT PATIENTS, WITH DIFFERENT BLOOD GROUP ANALYSIS RESULTS

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**Introduction - Purpose:** Forward grouping is the detection of erythrocyte ABO antigens and factor D. Reverse (anti) grouping is the detection of antibody in serum or plasma. Both of the procedures are performed to each patients and the results at the end of the procedure are compared.

**Findings:** Our case is a 41 years old woman with the diagnosis of acute myeloid leukemia (AML). She underwent autologous stem cell transplantation in 2012. When the stem cell transfection had been carried out, the donor was Rh positive, and the recipient was B Rh positive. The patient was followed in remission after transplantation and was evaluated as recurrent AML M0 in December 2016. Blood transfusion was planned for severe symptomatic anemia. In the blood sample, the forward blood group result was A Rh (+) and the reverse blood group result was AB Rh (+). The present situation was evaluated as chimerism. A Rh (+) blood transfusion was given during hospitalisation and no complication was seen.

**Discussion :** The result of reverse group sampling as AB Rh (+) was detected as a result of possible chimerism. It was evaluated as antibody formation as a result of the patient's recurrence of blasts from the original blood group. In the forward blood group analysis, the detection of A Rh (+) as the blood group of the patient indicates that only the donor antigen is present as it should be in the patient's serum. In this rare case, it is important that donor blood group must be given and by cross-match analysis as well as giving at least incompatible blood product.

**Keywords:** TRANSFUSION, ALLOGENEIC BONE MARROW TRANSPLANT, BLOOD GROUP