Abstract: PB2055

Title: PREGNANCY IN PATIENTS WITH APLASTIC ANEMIA – CLINICAL OBSERVATIONS

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Session Title: Bone marrow failure syndromes incl. PNH - Clinical

Background:

At the present stage, in patients with such serious diseases as AA and PNH, there are opportunities for successful pregnancy and successful delivery. However, these conditions remain potentially dangerous in terms of possible complications and require increased attention.

Aims:

Describe the features of the course of pregnancy and childbirth in patients with AA in remission after immunosuppressive therapy.

Methods:

We observed 4 women with aplastic anemia (AA) who received immunosuppressive therapy (IST) and became pregnant in remission. Age at the time of pregnancy was 27, 28 years and 29 years in 2 patients. The time from diagnosis of AA was 4 years, 4.5 years and 9 years for two cases. Three patients with severe AA (SAA) at baseline received combined IST (ATG+cyclosporine A), of them the complete remission (CR) was available in 1 patient, and partial remission (PR) in 2 patients with a combination of AA and paroxysmal nocturnal hemoglobinuria (AA/PNH). One patient with nonsevere AA (NAA) achieved PR after cyclosporine A monotherapy. For all observed patients IST was stopped at least 1 year before pregnancy.

Results:

The increase in the size of the PNH-clone during the remission was noted in both patients with AA/PNH: from 8% to 66% and from 40% to 94.7%, which was accompanied by signs of chronic intravascular hemolysis. Therefore, eculizumab was prescribed to both patients according to newly emerging indications – pregnancy. A significant deterioration in hematological parameters, including thrombocytopenia, which required transfusion of platelet concentrate, was observed in the third trimester only in one patient with a previously achieved CR. All four patients underwent surgical delivery (caesarean section): three – at term and one patient with AA/PNH and CR with gestational age of 28 weeks, due to progressive placental insufficiency and preeclampsia. In 2 patients (including those with transient hematological deterioration) newborns were without deviations from the norm (8-9 points on the Apgar scale), one child was born with signs of hypotrophy, and a premature newborn had signs of delayed intrauterine development, bronchopulmonary dysplasia. Further observation of patients for 5 to 7 years after delivery (9 to 14 years from the beginning of IST) showed the preservation of pre-pregnancy indicators corresponding to CR and PR. Of the 2 patients receiving eculizumab, one continues standard therapy, and the other patient discontinued therapy after 6 months without deterioration of hematological parameters and increased hemolysis.

Summary/Conclusion: The results of our observation indicate that even in the state of AA complete remission after the IST, latent hematopoietic disturbances are preserved. In this group of women, especially with AA/PNH, there is an increased risk of maternal and fetal complications. Despite the possibility of successful outcomes of pregnancy and childbirth in AA patients in remission, patients during pregnancy require special observation and timely correction of therapy.

Keywords: Aplastic anemia, PNH, Pregnancy