

15–18 March 2017 Rome, Italy

TITLE

## IMMUNOLOGICAL ASPECTS OF RECURRENT PREGNANCY LOSS

**AUTHOR/S** 

Darmochwal-Kolarz D (PL) [1]

## ABSTRACT

Objective: The aim of the study was to estimate the alterations in the phenotype of lymphocytes of women with unexplained pregnancy failures in comparison with healthy women.

Methods and Patients: Fourteen women with unexplained habitual miscarriages and 18 healthy, fertile women with the history of successful pregnancies were included in the study. The lymphocytes were isolated from peripheral blood and stained with monoclonal antibodies. The expression of selected surface molecules was estimated using the flow cytometric method.

Results: We found that the percentage of T CD 4+ lymphocytes, CD3-16/56+ cells, and T CD 8+11b-cells was significantly higher in patients with recurrent pregnancy loss in comparison with healthy women. The percentage of B-1 CD19+5+ lymphocytes was also significantly higher in women with unexplained habitual miscarriages in comparison with healthy women. Furthermore, we found higher expression of CD 25 molecule and HLA-DR antigen on T CD 3+ and T CD 4+ lymphocytes in the study group when compared to controls. Moreover, the percentages of B CD 19+ and T suppressor CD 8+11b+ lymphocytes were lower in women with pregnancy failures in comparison with the control group. The percentage of T CD 3+ lymphocytes and T CD 8+ cells did not differ in both studied groups. Similarly, the expression of CD 25 anigen and HLA-DR molecule on T CD 8+ did not differ in the study group when compared to controls.

Conclusion: Our results can suggest that the immunological alterations may be involved in the etiopathogenesis of unexplained recurrent pregnancy loss.