



Immunohistochemical Evaluation of CD3, CD4, CD8, and CD20 in Decidual and Trophoblastic Tissue Specimens of Patients with Recurrent Pregnancy Loss

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Aim: Recurrent miscarriages affect up to 5% of couples. CD3+ (T-Lymphocytes), CD4+ (helper T-Lymphocytes), CD8+ (cytotoxic T-Lymphocytes) and CD20+ (B-Lymphocytes) may participate in the pathophysiology of RPL (recurrent pregnancy loss). The aim of this study is to investigate the complicity of these molecules in RPL.

Materials & Methods: The miscarriage group was obtained from 20 women, between the ages of 35 to 42 years, who miscarried during the 1st trimester of gestation and control group consisted of 20 women, between the ages of 27 to 39 years, who had electively terminated their pregnancies, during the 1st trimester of gestation. Specimens were taken from decidua basalis, decidua parietalis and trophoblast and were studied using immunohistochemical methods. Monoclonal antibodies were used against CD3, CD4, CD8 and CD20. The results were statistically analyzed with Mann-Whitney test. **Results:** The lymphocytes levels in decidua parietalis displayed profound disparities among the two groups. Decidua basalis and trophoblast exhibited almost the same disparities regarding positive CD cells. CD4+ and CD8+ comparison in the endometrial tissue resulted to a significant difference among the two groups of study.

Conclusion: The analysis uncovered a strong relation among RLP and the presence of CD3+, CD4+, CD8+ and CD20+ in decidual parietalis tissue cells. Positive CD4 and CD8 expression in decidual basalis and trophoblastic cells were decreased, arousing the suspicion that their absence may disrupt significantly the immunological environment of the placenta. A distinct study on decidua basalis and decidua parietalis is essential, in order to avoid controversies on the results and the implication of decidual parietalis immune dysregulation, in RPL cases, to be evaluated