

Immunohistochemical study of IL-10 and CD46 in placental tissues in recurrent pregnancy loss

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Purpose: The is to clarify the role of IL-10 and CD46 in recurrent pregnancy loss (RPL), via an immunohistochemical case-control study in placenta tissues.

Materials and Methods: This is a case-control study in which the experimental group consisted of 20 women, 30 to 42 years old, who miscarried during the first trimester of pregnancy for unknown reasons, while the control group consisted of 20 women, 27 to 39 years old, who had voluntarily performed in termination of pregnancy in the first trimester. An immunohistochemical study was performed on histological samples of decidua basalis, decidua parietalis and trophoblast, using the immunohistochemical markers IL-10 and CD46. The results were statistically analyzed by the Mann-Whitney test.

Results: A statistically significant difference in IL-10 expression was detected between the control group and the miscarriage group on decidual cells (p-value <.0001). There was increased immunohistochemical staining on the decidua of the control group in comparison to the miscarriage group. Regarding CD46, the immunohistochemical analysis did not reveal a statistically significant difference between the two groups in either the decidual or trophoblastic cells.

Conclusion: IL-10 seems to be associated with the RPL phenomena