



Evaluation of VEGF, BCL-2 and BCL-6 by immunohistochemistry in the endometrial tissue of patients with recurrent pregnancy loss

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OBJECTIVE: To investigate the role of vascular endothelial growth factor (VEGF), B-cell lymphoma 6 protein (BCL-2) and BCL-6 in recurrent pregnancy loss (RPL). **METHOD** Histopathological examination was made of the uterine contents of two groups of women, a RPL group consisting of 20 women aged 35 to 42 years, who miscarried during the first trimester of gestation and a control group of 20 women, aged 27 to 39 years, who had undergone elective termination of pregnancy during the first trimester. The histopathological specimens, derived from the decidua basalis, decidua parietalis and trophoblast, were studied by immunohistochemical methods, using monoclonal antibodies against VEGF, BCL-2 and BCL-6. Statistical analysis was conducted by the Mann-Whitney test. **RESULTS** A statistically significant difference was detected in the expression of BCL-2, BCL-6 and VEGF between the RPL and the elective abortion group, in the decidual cells. In addition, significant difference was observed between the two groups in the expression of both BCL-2 and BCL-6 in the trophoblastic cells, but there was no difference in the VEGF expression. **CONCLUSIONS** This is the first study to document an increased expression of VEGF, BCL-2 and BCL-6 simultaneously, by immunohistochemistry, in the endometrial tissue of patients with RPL. The comprehension of the behavior of these biomarkers could lead to better understanding of the specific pathways involved in RPL. This knowledge could be beneficial for the development of therapeutic methods in the field of recurrent miscarriages.