35. PRP (PLATELET RICH PLASMA) IN ASSISTED HUMAN REPRODUCTION FAILURE

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Introduction. Infertility is a global problem with a global incidence of 13%, with a growing trend. Despite technical advances in assisted human reproduction, the success rate remains at most 35%. The success of implantation depends not only on the quality of the embryo, but also on the morphofunctional state of the endometrium. Platelet rich plasma (PRP) is a new model for the thin endometrium. It is freshly centrifuged human blood, which contains a high concentration of platelets. PRP is prepared from the patient's blood and contains many growth factors and cytokines, such as vascular endothelial growth factor (VEGF), platelet-derived growth factor (PDGF), epidermal growth factor (EGF), transforming growth factor (TGF) and many other cytokines that can facilitate tissue regeneration and healing.

Aim of study. Evaluation of the effect of endometrial rehabilitation treatment using platelet rich plasma in women with infertility who have at least one in vitro fertilization failure.

Methods and Materials. The endometrial rehabilitation technique with PRP has been performed in 70 patients with a history of at least one IVF failure and which involves a new IVF procedure.

Results. Intrauterine infusion with PRP stimulated and accelerated the growth of the endometrium (100%), decreased fibrosis, thus decreasing intrauterine adhesions in women with sindrom Asherman (9%), decreased sperm inhibition in endometrial secretion (14%), leading to successful embryo implantation.

Conclusion. Intrauterine PRP treatment increases the rate of pregnancy in infertile women with thin endometrium, as it increases the receptivity and vascularity of the endometrium because it contains growth factors that have positive effects on local tissue repair and endometrial receptivity. PRP has a positive impact on the increase in the number of antral follicles and prevents the inhibition of sperm in the peritoneal tubal fluid.