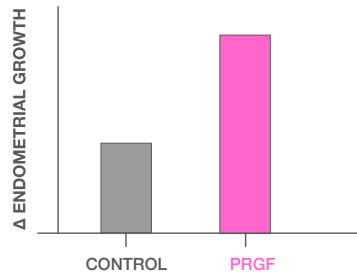




VERY THIN ENDOMETRIUM

ENDOMETRIAL INFUSION WITH PLASMA RICH IN GROWTH FACTORS (PRGF) IN IVF CYCLES: RANDOMIZED CLINICAL TRIAL IN **VERY THIN ENDOMETRIUM** AND OBSERVATIONAL UNCONTROLLED FOLLOW-UP

ENDOMETRIAL INFUSION OF PRGF **INCREASED BY MORE THAN 2X** THE ENDOMETRIAL THICKNESS COMPARED TO THE UNTREATED GROUP **IN PATIENTS WITH VERY THIN ENDOMETRIUM**



THE EFFECT OF PRGF IS PROLONGED FOR 1-3 CYCLES AFTER ADMINISTRATION

PREGNANCIES AFTER ADDITIONAL CYCLES OF PRGF IN CASES OF **VERY THIN ENDOMETRIUM**

30%

per patient

20%

per transfer

ABSTRACT

Ines Castells, Marcos Ferrando, María de la Fuente, Maitane Gantxegi, Fernando Quintana, Juan Manuel Mascaros, Eduardo Anitua, Roberto Matorras

Endometrial Infusion with Plasma Rich in Growth Factors (PRGF) in IVF Cycles: Randomized Clinical Trial in Very Thin Endometrium and Observational Uncontrolled Follow-Up After the Randomized Clinical Trial

OBJECTIVE

To assess if the instillation of plasma rich growth factors (PRGFs) improves endometrial thickness (EMT) in frozen embryo cycles performed under hormone treatment where the endometrium was very thin (≤ 5 mm).

METHODS

First, a randomized controlled trial (RCT) was performed comparing women only receiving an increase in estrogen therapy ($n = 9$) and women receiving both the increase in estrogen therapy and three instillations of PRGF ($n = 13$). The second part of the study consisted of a prospective observational follow-up of the patients included in the RCT (for 1-3 months in the study group, and for 1-6 months in the control group).

RESULTS

In the RCT, there was an increase in EMT in both the PRGF and control groups. However, the increase was significantly higher in the PRGF group (1.30 ± 0.67 mm) compared to the control group (0.58 ± 0.51 mm). In the PRGF group, 23% achieved an EMT of 7 mm compared to 0% in the control group. There were 2 pregnancies in the PRGF group resulting from the 3 transfers performed in that group. No transfer was carried out in the control group. There was a significant increase in EMT 1-3 months after the PRGF cycle. The live birth rate per transfer was 20% in the cycles following the PRGF cycles, whereas it was 30% per starting woman. For women in the control group who later underwent PRGF, the LBR was 57.1%.

CONCLUSIONS

PRGF instillation in cases of very thin endometrium increases EMT moderately. It is suggested that the beneficial effect of PRGF may persist for 1-3 cycles after instillation.