RANDOMIZED CONTROLLED TRIAL IN PATIENTS WITH REPETITIVE IMPLANTATION FAILURE: DAY-5 EMBRYO TRANSFER WITH AND WITHOUT PREIMPLANTATION GENETIC SCREENING (PGS)

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Introduction: The aim of this study was to evaluate the usefulness of PGS in patients <40 years of age, with at least 3 previous implantation failures in which other causal factors were previously discarded.
Material and methods: Patients were allocated into two groups: conventional IVF/ICSI cycle with blastocyst transfer (group A) or PGS cycle with screening for chromosomes 13, 15, 16, 17, 18, 21, 22, X and Y (group B). The following exhaustive infertility work-up was performed: vaginal ultrasound (hysterosonography or hysteroscopy); karyotypes; thrombophilia study (anticardiolipin and lupus anticoagulans antibodies; Antitrombine III; APCR (if positive, screening for factor V, Leiden mutation); levels of protein C and S; Serum homocystein and screening for MTHFR and factor II mutations. Exclusion criteria were defined as: any abnormality detected in the previous infertility work-up; hidrosalpinx; previous ectopic or uterine miscarriages; previous embryo transfer with high difficulty and/or bleeding; patients with other indications for PGD, patients with <5 oocytes, in such cases, oocytes/ were vitrified to accumulate them in a further cycle.
Results and conclusion: There was a significant increase in group B compared to group A, regarding ongoing pregnancy rates per cycle (45.9 vs. 25.6; p=0.0323) and ongoing implantation rates (36.4 vs. 21.3; p=0.0364). Therefore, PGS could be beneficial in a selected group of patients with recurrent implantation failure in whom other potential causes were discarded.