

00044 Intracytoplasmic Sperm Injection (ICSI) for Non-male Factor After Unsuccessful Conventional IVF - Case Report

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Aims: Intracytoplasmic sperm injection (ICSI) involves injection of a single sperm into a mature oocyte, whereas in conventional IVF, 100,000 motile sperm are inseminated to each oocyte. ICSI was introduced in 1992 and had become the treatment of choice for male factor infertility, however its role in non-male factor still needs to be investigated.

Methodology: A 36 years old patient tried to conceive for 4 years. She had regular menses every 28-30 days. Antral follicle count was 22 and her husband's semen analysis showed density 41.5 million/ml, motility 44%, morphology 4% and hyaluronan binding assay (HBA) 77%. Patient underwent conventional IVF in February 2015, she was stimulated using antagonist cycle, Puregon 200 IU (D2-9) with Orgalutron (D6-10). She had hCG 10000IU trigger on Day 10. Patient had 8 eggs retrieved, all 8 eggs underwent IVF insemination and only 2 fertilised. The 2 embryos were transferred on Day 2. Patient did not get pregnant.

Result: Patient underwent second IVF cycle using antagonist cycle, Puregon 300 IU (D2-9) with Orgalutron (D6-10) and growth hormone. hCG trigger was the same as previous cycle. She had a total of 10 eggs retrieved, 9 eggs were mature to undergo ICSI and 6 eggs fertilized. 2 embryos were transferred on Day 5 with two extra embryos for freezing. Patient was pregnant and delivered a healthy baby. Patient subsequently underwent frozen-thaw cycle using actual regulated cycle with Lucrin suppression. 2 frozen embryos were thawed and transferred, the patient had twin pregnancy.

Conclusion: Although there are no data till date to support the routine use of ICSI for cases in which no obvious male factor indication is present, nevertheless, our case report showed ICSI may improve fertilization rate and clinical outcome in a subsequent cycle following poor fertilization or fertilization failure in a prior IVF conventional insemination cycle.