CASE REPORT: SUCCESSFUL PREGNANCY ACHIEVED WITH CALCIUM IONOPHORE OOCYTE ACTIVATION IN A PATIENT WITH PREVIOUS REPEATED FAILED IVF CYCLES

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Abstract Body

Aim: To describe a successful pregnancy and delivery after calciumionophore oocyte activation in a patient with previous repeated failed in-vitro fertilisation (IVF) cycles with Intracytoplasmic sperm injection (ICSI).

Methods: This case study describes a 34-year-old woman presented with secondary infertility for 4 years. Her indications for IVF are blocked tube on one side, decreased Antral Follicle Count and presence of fibroids in the uterus. She had 5 failed fresh IVF cycles and 1 failed frozen embryo transfer cycle performed in other IVF centres. In her 6th fresh IVF cycle in our Centre, she was given Early Short Antagonist regime with Growth Hormones, Cetrotide and Recombinant Follicle-Stimulating Hormone. Oocyte pick-up was performed and the eggs were denuded after 2 hours incubation. ICSI was performed on the mature Metaphase II (MII) eggs. Oocyte activation was performed after ICSI using a commercially available GM508 CultActive media as according to the protocol. The embryos were cultured in sequential media to Day 3, whereby the embryos were graded to determine their suitability for embryo transfer (ET).

Results: A total of 10 eggs were collected, out of which 8 were in the MII phase. 7 out of 8 eggs (87.5%) were fertilised. 5 out of 7 (71.4%) were good quality embryos on Day 3, which was defined as embryos with more than 6 cells and less than 10% fragmentation. The patient had 2 good embryos for transfer and 3 for freezing. The patient is successfully pregnant in this cycle and delivered a healthy baby boy.

Conclusion: Oocyte activation using calcium ionophore is a good treatment for patients with repeated failed IVF cycles by improving fertilisation rate and embryo development, thus increasing chances for successful pregnancy and delivery.