

Title: Successful Conception with IVF-ICSI in a POSEIDON Group 1 Poor RESPONDER with Unexplained Infertility



INTRODUCTION: POSEIDON Group 1 poor responders, despite having a good ovarian reserve, present challenges in IVF due to suboptimal responses to stimulation. Tailored protocols are crucial to improving outcomes in such cases

AIMS AND OBJECTIVES:

To report a case of successful conception with IVF-ICSI in a 34-year-old woman with unexplained infertility and POSEIDON Group 1 poor ovarian response, highlighting the role of individualized stimulation protocols.

METHODOLOGY:

A nulligravida with 9 years of infertility with multiple failed ovulation induction cycles and IUIs was evaluated. They were advised IVF-ICSI (Intra-Cytoplasmic Sperm Injection) due to unexplained infertility Following two cancelled antagonist cycles (rFSH 250–300 IU + HMG 150 IU) due to mono-follicular recruitment, a long agonist protocol was initiated from day 21 of cycle with inj leuprolide 0.5 mg .From day 2 of Stimulation rFSH 150 IU + HMG 300 IU + leuprolide 0.25 mg started . Inj rhCG 250 mcg was used for trigger.

OUTCOME:

A total of 12 oocytes were retrieved, and ICSI was performed with the husband's sperm. A single Day 5 blastocyst was formed on day 5.. A frozen embryo transfer was performed. The patient tested positive for pregnancy with a beta-hCG of 260 mIU/mL on Day 15 post-transfer. A 6-week ultrasound confirmed a single intrauterine gestation with a fetal heart rate of 140 bpm.

CONCLUSION:

This case emphasizes the importance of individualized protocols for POSEIDON Group 1 poor responders. Transitioning from antagonist cycles to a long agonist protocol, combined with optimized stimulation protocol and proper luteal phase support, was critical in achieving a successful outcome. This highlights the potential of personalized care in overcoming challenges in poor responders .