

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.

CASE DISCUSSION: A 34 year old nulligravida married for 9 years came to FERTY 9 fertility centre secudarabad hoping for a conception . Both partners were completely 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 on day 11 of stimulation.. Oocyte aspiration was scheduled .12 Oocytes were retrieved. Post ICSI with Husband sperm on Day5 single blastocyst obtained. Subsequently, Frozen embryo transfer was done.

RESULT: She got positive beta hcg after 15days with a value of 260 m IU /ml. Followup scan revealed a single intrauterine gestational sac with fetal heart rate of 140 bpm at 6 weeks .

CONCLUSION : This case study highlights careful management, individualized stimulation protocols, and proper luteal phase support played a critical role in this positive outcome. The management of these patients may imply the increase in the starting dose of recombinant FSH and/or supplementation with LH or even double ovarian stimulation in an attempt to increase the number of oocytes retrieved and therefore the final reproductive outcome. The use of GH/testosterone and priming protocols including estradiol/OCPs represent other promising options.

REFERENCES:1.Polyzos NP, Drakopoulos P. Management Strategies for POSEIDON's Group 1. Front Endocrinol (Lausanne). 2019 Oct 1;10:679. doi: 10.3389/fendo.2019.00679. PMID: 31632353; PMCID: PMC6779707.