AICOG 2025
Mumbai
67th All India Congress of Obstetrics & Gynaecology
FOGSI celebrates 75 years - Diamond Jubliee
8-12 January, 2025 | JIO World Convention Centre

Poster Number: EP 464 Name: Sinha B[1], Lad N[2], Mhaske S[3]

Title: The Effect of Growth Hormone Adjuvant Therapy in Poor Ovarian Reserve of Poseidon 4 Group with Previous Failed IVF

INTRODUCTION

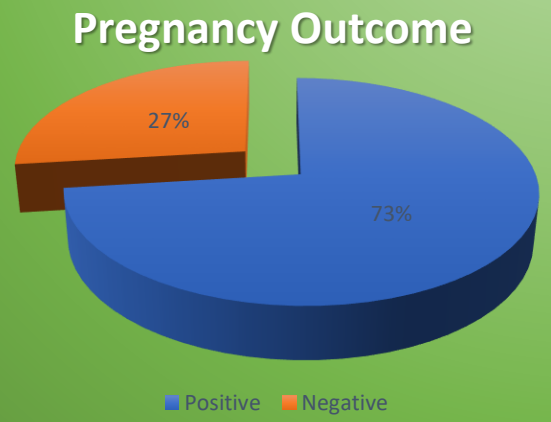
Recent trend of increasing use of assisted reproductive technology (ART) among patients with low ovarian reserve.[1] As there is a significant shift in the age group who are planning for pregnancy. Most of the females in urban areas are planning pregnancy beyond 35 years, causing a rise in the cases of low ovarian reserve.[2] As growing interest in using growth hormone as adjuvant therapy in IVF treatments, highlighting the need for more research on its efficacy in India.

AIM & OBJECTIVES

To explore the efficiency of growth hormone adjuvant therapy among patients with poor ovarian reserve of Poseidon 4 group (PG4, age ≥35 years AMH <1.2 , AFC <5) with previous failed IVF at a Apollo Fertility Clinic , at Apollo Hospitals , Navi Mumbai

MATERIALS & METHODS

Participants: Thirty patient with Poseidon 4 group women, aged ≥35 with AMH <1.2, AFC <5. All patients were scanned on day or day 3 and if serum estradiol levels were less than 60 then stimulation was started with Gonadotropins.4IU Of growth hormone was added along with gonadotropins till the day of trigger . Antagonist protocol was followed for all patients. Cetrorelix 0.25 given when the follicles reached 14 mm till the day of trigger. Tigger given with Ovitrelle or combination of Ovitrelle and decapeptil. Most of the cases embryos were frozen and later Blastocysts were transferred.



RESULTS

Mean age of the participants was 36.6 ± 2.3 years, with the majority (66.7%) aged between 36 and 38 years. The mean anti-müllerian hormone (AMH) level was 0.95 ± 0.4 ng/ml, and 63.3% of participants had low AMH levels, highlighting the challenging ovarian reserve in this group. The average number of oocytes retrieved was 3.56 ± 0.7, with 23.3% of patients retrieving more than four oocytes. Additionally, 53.3% of participants had fewer than three oocytes, with a mean of 3.10 ± 1.8, patients with higher semen quality, particularly those with concentrations ≥40 M/ml and morphology >2% were significantly associated with positive pregnancy outcomes (p=0.04 and p=0.011, respectively), 73% positive pregnancy outcome, emphasizing the potential efficacy of this regimen in patients with poor ovarian reserve.

CONCLUSION

Beneficial effect of growth hormone adjuvant therapy among patients with poor ovarian reserve of Poseidon 4 group (PG4, age ≥35 years) with previous failed IVF was high. As growth hormone improve the ovarian response and pregnancy outcome among poor ovarian reserve females. Additional long term research may yield more information.

REFERENCES

1. Cai MH, Gao LZ, Liang XY, Fang C, Wu YQ, Yang X. The effect of growth hormone on the clinical outcomes of poor ovarian reserve patients undergoing in vitro fertilization/intracytoplasmic sperm injection treatment: A retrospective study based on POSEIDON criteria. Front Endocrinol (Lausanne). 2019 Nov 12;10:775.
2. Li X, Wang L, Lv F, Huang X, Wang L, Pan Y, et al. The influence of different growth hormone addition protocols to poor ovarian responders on clinical outcomes in controlled ovary stimulation cycles. Medicine. 2017;96:e6443.