

THE MORE THE MERRIER? MILD VS CONVENTIONAL IVF IN "POOR PROGNOSIS" PATIENTS

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Abstract Body

Objective: the "mild" stimulation approach with aromatase inhibitors (AI) for IVF treatment is aimed to develop more patient-friendly protocols in which the risks are minimized and the results are still acceptable. However, the level of evidence supporting the use of "mild" stimulation protocols is still rather limited in young patients with fertilization failure in past on conventional IVF cycle(s).

Design: prospective cohort study.

Patients: totally were enrolled 17 patients under <35 years old, with normal ovarian reserve and normouulatory cycles, BMI < 29 kg/m², no history of recurrent miscarriages and absence of severe male factor - demanding surgical semen extraction. All of them had undergone 2 IVF failures in conventional cycles in past. The main reason of previous cycle cancellation was abnormal fertilization on corresponding day after ICSI. Intervention: a "mild" IVF cycle was defined as a stimulation regimen in which AI Letrozole 2,5 mg – twice a day from 3-10 days of cycle was used in combination with 150 IU of recombinant gonadotropins on 3-d and 5-th day of Letrozole administration. The final maturation of oocytes was triggered by Ovitrelle 250 mcg.

Main outcome measure: fertilization rate with two pro nuclei embryos after ICSI per patient. A factor limiting the effectiveness of "mild" strategy in terms of pregnancy rate per cycle was likely to be the relatively high rate of cycle cancellation due to parasite peaks of LH.

Results: normal fertilization was achieved in 65 % cases. 3PN/ 4PN embryos still were observed in 6 patients.

Conclusion: mild stimulation approaches, aiming at a more physiological response, might be able to improve the genetical quality of oocytes and corresponding embryos in young reproductive age patients. This hypothesis, however, needs to be validated by further trials including a higher number of patients and evaluation of embryos based on preimplantation genetic testing.

Keywords: Fertilization, IVF, Letrozole, mild stimulation,