

COMPARISON OF EMBRYO QUALITY IN POOR RESPONDER PATIENTS WHO UNDERWENT PREVIOUS IVF FAILED CYCLES AND SUBSEQUENT IVM TREATMENT

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Introduction: Adequate follicular recruitment and maturation is essential for successful IVF. Throughout the rapid evolution of ART, management of poor responders has been one of the most difficult challenges, with disappointing results including high cancellation and failed fertilization rates. To date, the ideal stimulation regimen has not been established. Human in vitro maturation of oocytes, a treatment offered to women with PCOS to avoid OHSS risk has recently been proposed for PGD and egg donation.

Objective: To examine if IVM treatment is an option for poor responders with previous failed IVF cycles.

Material and Methods: 24 poor responders (mean age 38.7) who failed on average 3.04 previous IVF cycles were analyzed. Antagonist protocol was performed for IVF and hCG-priming was performed for IVM cycles.

Results: The mean number of eggs recovered was 4.67 ± 4.2 in IVF and 2.88 ± 3.1 in IVM cycles ($P=0.06$). The mean number of mature oocytes was 3.2 ± 2.8 in IVF and 2.2 ± 2.1 in IVM. The rates of fertilization (74.1%), cleavage (92.2%) and good quality embryos at cleavage (44.3%) in IVF cycles were similar to IVM cycles (73.46%; 94.4%; 58.8% respectively) ($P=0.17$). There were two clinical pregnancies after IVM.

Conclusion: There were no significant differences in embryological aspects between IVF and IVM cycles that were performed in the same patients. This study suggests that IVM treatment can be considered an alternative strategy for poor responders with the advantages of an easy and inexpensive approach.