IMPACT OF BODY MASS INDEX ON IN VITRO MATURATION OUTCOMES IN PCOS PATIENTS

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Objective: To evaluate the outcome of PCOS patients undergoing in vitro maturation (IVM) according to their body mass index.
Study design: Between 2005 and 2008, 116 IVM cycles were performed in 107 PCOS-patients. The data were retrospectively analyzed from our database. The patients were classified in four groups according of the BMI (kg/m2) Group 1-(BMI < 20 kg/m2 (N=17), Group 2- 20 ¡i BMI < 25 (n=50), Group 3- 25 ¡i BMI < 30 (n=24), and Group 4- BMI > 30 (n=25)). All the patients had an IVM cycle following the protocol of our clinic.
Results: No differences were found in general characteristics of the patients.
The baseline scan showed no differences between the four groups regarding the number of follicles; the mean AFC for the 4 groups was 32.29¡15.33¸¡34.38 ,11.9¸¡34.02 ,8.9¸ and 33.76¡8.95¸ respectively. The day of HCG was between day 11 and 12 of the cycle. No significant difference was noted for the number of follicles the day of HCG administration. However, a downward trend in the number of small antral follicles and the size of the dominant follicle were found within BMI>30 patients. We did not find any significant differences in the number of follicles punctured and the number of oocytes collected and maturated in vitro. The IVM-rate for subgroups 1-4, respectively, was 63%, 64%, 60%, and 67%. Therefore all parameters of IVM outcome were comparable, including clinical pregnancy rate.
Conclusion: Up to date there is no evidence that obesity affect negatively results of in vitro maturation in patients with PCOS.