

SUBOPTIMAL RESPONSE IN CONTROLLED OVARIAN STIMULATION (COS) IN YOUNG OOCYTE DONORS

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Objective: To tailor COS in ART, a category of young women who, despite a standard COS, display 4-9 oocytes, has been identified as suboptimal responders with lower live birth rates (LBR) per started cycle than women with normal (10-15 oocytes) and higher (15 oocytes) retrieval (1), suggesting that number and quality of those oocytes might affect outcome. We addressed this question in our oocyte donation(OD) model. Study design: This is a retrospective database analysis of donors who had different response in subsequent COS: suboptimal (4-9 oocytes) or normal (10-15 oocytes). Subsequently, we looked if changes in COS resulted in increased numbers of oocytes and ART outcomes. Several ART parameters were recorded from donor and recipient cycles. Results: Cycles with normal response resulted in higher pregnancy rates(PR) than suboptimal (60.8% vs. 54.9%, $P=0.022$) while LBR were respectively 38.2% and 34.3% ($P=0.188$). In subsequent cycles, COS dosage was increased in 108 suboptimal and 82 (75.9%) responded as normal. PR were 50.0% vs. 67.6%, ($P=0.149$) and LBR 16.7% vs. 33.8% ($P=0.160$) respectively for suboptimal and normal. In 119, COS was maintained and 86 (72.3%) displayed normal response. PR and LBR for suboptimal and normal were 50.0 vs. 65.5 ($P=0.287$) and 21.4% vs. 42.0% ($P=0.160$). Conclusions: Suboptimal response of a donor is associated with impaired outcome in the recipient. In these young patients, oocyte yield can increase when COS dosage is augmented or even if the dosage is maintained, resulting in much better ART outcomes.

References:

1- Drakopoulos P et al. Hum Reprod 2016; 31: 370-6