

Hypertensive disorders and pregnancy outcomes in oocyte donation pregnancy in comparison with *in vitro* fertilization group

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Objective. The use of oocyte donation (OD) is in important growth in last decades, became an inseparable part of assisted reproductive technology (ART) for infertile women wishing pregnancy.

The objective was to evaluate the impact of OD on hypertensive disorders and maternal-foetal outcomes compared with IVF (FIVET-ICSI) group.

Materials and Methods. Retrospective analysis of OD pregnancy follow-up from 2016-2023, obtained in Center of ART of Careggi University Hospital, Florence. The study population included 512 (35%) OD pregnancies, 925 (65%) FIVET-ICSI pregnancies.

Results. Overall of preeclampsia diagnosis was in 54 (10.5%) OD and 68 (7.4%) FIVET-ICSI pregnancies (confidence value = 95%, $p = 0.037$). For OD, vaginal delivery (VD) was observed

in 10 (18%); the caesarean section (CS) was found in 44 (82%) of preeclampsia cases. VD in FIVET-ICSI group was 17 (26%), CS was in 51 (75%) preeclampsia cases (no statistical significance).

OD complicated with preeclampsia, 25 (38%) newborns were delivered before 36 weeks, and it was found low birth weight in 49 (75%) newborns. 19 (29%) newborns were hospitalized in neonatology department; 1 (2%) case of intrauterine foetal death and 2 (3%) cases of peripartum neonatal death were observed.

Conclusions. OD has major risk of hypertensive disorders and maternal- perinatal complications compared with FIVET-ICSI; otherwise, no statistic significance was observed for delivery type, which might be explained by general higher risk of caesarean section in preeclampsia.