

Variable	1st donations ^A	2nd donations ^B	3rd donations ^C
% Survived	93.9 ± 1.06	93.5 ± 1.25	81.8 ± 7.65
% Fertilized	87.8 ± 1.72	89.7 ± 1.48	82.6 ± 9.76
% Cleaved	86.7 ± 1.77	85.2 ± 2.06	82.6 ± 8.73
% Blastocyst	53.7 ± 2.89	59.0 ± 3.58	62.2 ± 11.53
% Implantation*	45.7 ± 4.39	57.0 ± 5.23	45.5 ± 12.53

Data presented as mean ± S.E.M. ^An = 97, ^Bn = 75, ^Cn = 13. No statistical differences were observed between 1st, 2nd and 3rd donations for any of the variables ($P \leq 0.05$). * Some data points for implantation rate are pending and were omitted. $n^{imp.1} = 90$, $n^{imp.2} = 71$, $n^{imp.3} = 11$.

CONCLUSION: Results imply that sequential donations have no significant negative effect on egg quality, survivability or developmental potential. Donors with successful first cycles can thus be encouraged to return for subsequent donations. Results may be valuable to potential donors concerned about the effects of egg donation on subsequent fertility. Research on natural reproductive performance of egg donors later in life will be valuable to give more clarity on the subject.

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ADD ONS FOR IN VITRO FERTILISATION (IVF). AN ACT OF DESPERATION? B. Vollenhoven, T. Osianlis, N. Hope, C. Motteram, L. Rombauts. Monash IVF, Melbourne, VIC, Australia; Obstetrics and Gynaecology, Monash University, Melbourne, VIC, Australia; Gynaecology, Southern Health, Melbourne, VIC, Australia.

OBJECTIVE: Using a large retrospective case-control study we sought to investigate the effectiveness of a combined co-treatment with aspirin, doxycycline, prednisolone ± luteal phase estradiol patches (treatment) on average number of oocytes collected (O), fertilisation (FR), clinical pregnancy (PR) and live birth (LBR) rates in fresh and frozen IVF/microinjection (ICSI) cycles.

DESIGN: A 1:1 matched case control study at Monash IVF from 2005-2008.

MATERIALS AND METHODS: The total number of cycles was 970 with 324 fresh cycles pairs and 161 frozen cycle pairs. Cycles were matched for number of embryos transferred (ET), day of transfer, insemination method, patient age, stimulation cycle number. 254 patients had aspirin, doxycycline and prednisolone and 231 had the same drugs with estradiol. Data were analysed using Chi-square tests for categorical variables and independent samples and *t*-test for comparison of group means. Data are presented as frequency (%) and mean (± SD). $P < 0.05$ was considered statistically significant.

RESULTS: We found no difference in O, PR or LBR when co-treatments with or without estradiol were investigated separately, hence the grouping of the treatments. There was also no difference in outcomes between treatment and control groups in IVF or ICSI cycles. As table 1 shows, there was a detrimental affect on LBR for frozen cycles when co-treatments were used.

TABLE 1

	Treatment	Control	P Value	
O	7.7 (± 6.5)	8 (± 6.8)	0.54	
FR	79.3%	81.1%	0.23	
PR	Fresh	38.9%	38.6%	0.94
	Frozen	16.8%	23.0%	0.16
LBR	Fresh	32.7%	32.7%	1
	Frozen	9.3%	17.4%	0.03*

* = Significantly different

When the matched pairs were examined according to number of stimulated cycles (SC) 1 or 2 compared with ≥ 3 , the implantation rate was lower in the treatment group SC1 or 2 (21.4%) compared with 30.1% in control ($P=0.03$). Miscarriage rates were significantly higher ($P=0.02$) in the $SC \geq 3$ treatment (25%) compared to 10.3% in control.

CONCLUSION: This matched case-control study does not provide support for the continued use of these adjuvants in IVF patients.

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PROPHYLACTIC CERCLAGE IN TWIN PREGNANCIES FROM ART: OBSTETRIC OUTCOMES. E. A. Galindo, P. Galache, I. Obeso,

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OBJECTIVE: To compare the obstetric outcomes of twin pregnancies after ART with and without prophylactic cerclage (McDonald technique).

DESIGN: Cohort prospective study.

MATERIALS AND METHODS: A total of 129 patients were included, all of them carrying a twin pregnancy resulted from ART between years 2007-2010. Prophylactic cerclage was performed in 46 while the remaining 83 served as controls. The decision about performing or not the cerclage was taken randomly by each attending physicians and all the patients were followed up to delivery.

RESULTS: All the demographic characteristics between groups (cerclage and no cerclage) were comparable: age (33.1 ± 5.4 vs 33.8 ± 5.21), weight (68.1 ± 13.7 vs 67.5 ± 12.32 kg), height ($1.59 \pm .066$ vs $1.56 \pm .077$ mts), BMI (26.4 ± 5.00 vs 23.0 ± 1.94), FSH day 3 (7.6 ± 6.04 vs 10.49 ± 12.2 IU), LH day 3 (4.03 ± 2.94 vs 5.81 ± 5.23 IU), E2 day 3 (57.6 ± 47.9 vs 57.07 ± 60.6 pg/dL) and PRL (17.46 ± 7.60 vs 16.96 ± 12.32 ng/ml). Similarly there were no differences in day of retrieval ($12.67 \pm .93$ vs 12.59 ± 6.11), aspirated oocytes (12.83 ± 5.3 vs 11.70 ± 7.23), MII oocytes (10.32 ± 5.30 vs 9.77 ± 6.73), injected/inseminated (10.86 ± 5.43 vs 9.65 ± 5.79), fertilization rate (64% vs 74%), day of transfer (2.96 ± 0.81 vs 2.95 ± 0.72), embryos transferred (2.87 ± 0.65 vs 3.02 ± 0.62). Among the obstetric variables, a significant difference was observed in gestational weeks (35.65 ± 1.96 vs 33.79 ± 5.28 , $P < 0.05$), average weight (2358.8 ± 462.73 vs 2103.90 ± 711.78 , $P < 0.05$).

CONCLUSION: Patients with twin pregnancy and prophylactic cerclage had a better gestational age and better birth weight compared to those without cerclage. Prophylactic cervical cerclage should be considered as routine in twin pregnancies from ART.

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INCIDENCE OF CONGENITAL ANOMALIES IN 2351 IVF/ICSI BABIES. P. E. Levi Setti, A. Baggiani, S. Castelli, G. Bracone, A. Marras, E. Albani. Department of Gynecology, Operative Unit of Gynecology and Reproductive Medicine, IRCCS Istituto Clinico Humanitas, Rozzano, Milano, Italy.

OBJECTIVE: Follow up of babies born from infertile couples enrolled in an ART program is a major clinical effort and a quality assurance standard for National and International Registers. Aim of the present study is to present the incidence of congenital anomalies of babies born after transfer of fresh IVF/ICSI embryos in an infertile population.

DESIGN: Retrospective study was performed from 1996 to may 2009.

MATERIALS AND METHODS: All pregnancies obtained after the transfer of fresh embryos were followed by a group of clinical psychologist at least at the conclusion of the prenatal period and every 6 months after delivery. All pregnancies ≥ 24 weeks of gestational age were considered in the study. Eurocat (European Surveillance of Congenital Anomalies) classification was applied to identify congenital anomalies.

RESULTS: 1867 deliveries were recorded, 1424 (76.4%) single pregnancies, 398 (21.3%) twins and 43 (2.3%) triplets. Female age at the beginning of induction was 35.4 years ± 4.1 years. A total 2351 babies were delivered, 1137 males (48.4%) and 1214 females (51.6%).

TABLE I. Congenital anomalies incidence after ART cycles with fresh embryo transfer.

	Fresh Cycles
Babies born	2351
Major anomalies	90 (3.8)
CNS - Neural Tube	5 (5.6)
Cardiovascular	25 (27.8)
Gastrointestinal	9 (10.0)
Genitourinary	21 (23.3)
Muscular-skeletal	6 (6.7)
Chromosomal abnormalities	7 (7.8)
Labiopalatoschisis	1 (1.1)
Metabolic	2 (2.2)
Genetic abnormalities	3 (3.3)
Polimalfomation Syndrome	7 (7.8)
Other*	3 (3.3)

* 2 congenital deafness, 1 mastocytoma right hand.