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## **Posters**

eclampsia during pregnancy in Iran, although assessment of effective variables on this relation in this country is necessary.

Key Words: Polycystic ovarian syndrome, Pre-eclampsia, Gestational hypertension.

## P-1258

Serum estradiol pattern during coasting is different in antagonist cycles compared to long agonist cycles in in vitro fertilization

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Introduction: Coasting is the most popular strategy for the prevention of OHSS during ovarian stimulation. Use of antagonists also decreases the incidence of OHSS compared to long agonist cycles. Still, there might be a need to coast in antagonist cycles. Therefore, in this retrospective analysis, we aimed to compare the change of serum estradiol levels after withholding the gonadotropins between long agonist and antagonist cycles, as well as the duration of coasting.

Material/Methods: Antagonist or long luteal agonist cycles, in which coasting was performed, were analyzed in this retrospective analysis. Among 4220 cycles between 2001 and 2006, coasting was performed in 115 cycles. Coasting has been performed for the indications of [1] presence of > 20 follicles, which were >10 mm in diameter, and/or [2] presence of high (>4000 pg/mL) serum estradiol level. Serum estradiol levels were determined daily or every other day during coasting until serum estradiol levels decreased to <4000 pg/mL. Antagonist cycles were compared to long agonist cycles with respect to the duration of coasting and the serum estradiol levels following withholding gonadotropins. Cycle characteristics were compared by using the Student's t-test and chi-square test, where appropriate. Each successive day was compared with each other by using Wilcoxon signed-rank test or paired t-test, where appropriate. Analysis of variance for repeated measures was not used since number of subjects was decreasing with increasing number of successive days due to different durations for coasting. A further minor reason for analysing days separately was that serum levels have not been determined in weekends, i.e. daily, for every

Results: Cycle characteristics and pregnancy rates are shown in Table 1. The pattern of serum estradiol change was different between groups; it increased in the first day and decreased thereafter in the agonist group, however, it began to decrease from the first day in the antagonist group (Table 2).

Table 1. Age and cycle characteristics in the long agonist and antagonist groups (NS = Not significant; E = Estradiol)

	Agonist cycles (n = 65)	Antagonist cycles (n = 50)	Р		
Age (years)	27.72±3.91	30,58±4.85	0.001		
Duration of gonadotropin stimulation (days)	9.25±1.72	9.60±3.15	NS		
Total dose of recFSH (IU)	1835±628	2010±770	NS		
Serum E level at the beginning of	4532±677	4588±658	NS		
coasting (pg/mL) Peak serum estradiol level (pg/mL)	5742±1658	5104±1351	0.03		
Duration of coasting (days)	2.57±1.41	1.96±0.88	0.005		
Serum estradiol level on the day of hCG	3187±953	2966±972	NS		
(pg/mL) Number of total oocytes	15.03±7.30	19.78±9.39	0.003		
Pregnancy rate (/ET; %)	45.3	43.8	NS		

Table 2. Daily serum estradiol (E) levels (mean ± SD) in antagonist and long agonist cycles. Each row indicates the results of the two successive days only. ( = Mean for [ELater day – EEarlier day] /

EEarlier day; NA = None-applicable)

	n	Day 1	Day 2	Day 3	Day 4	Δ (%)	P
	52	4517±686	5078±1678	NA	NA	+ 12.6	0.011
Agonist Antagorist	29	NA.	5713±1512	5065±2142	NA.	- 8.8	NS
	19	NA	5713±1512	5065±2142	NA	- 25.0	0.013
	36	4629±706	4342±1356	NA	NA	-4.8	NS
	18	NA	5374±853	3922±2145	NA.	- 29.3	0.008
	12	NA	6004±1560	4068±1715	- 32.5	0.003	0.003

Conclusion: Serum estradiol level follows a different course during coasting in antagonist cycles when compared to long agonist cycles. This causes a shorter duration of coasting in these cycles when compared to long agonist cycles.

## P-1056

The effect of source of eggs (infertile donor vs. paid recipient), age of donor, and history of a previous pregnancy on pregnancy and implantation rates in recipients

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Introduction: The source of donor occytes could theoretically influence the chance of successful pregnancies in recipients. Confounding variables include whether the donor was infertile sharing half of her eggs with a recipient for economic consideration vs. paid donors, the age of the donor, and the history of whether they were previously pregnancy themselves or not.

Material/Methods: A retrospective review of donor egg cycles over a 10 year period was evaluated. Donors were allowed to be up to age 35. If the donor was paid their eggs were split between two recipients. The infertile donor also had embryos transferred or they were frozen for a future transfer. The data were stratified according to source of eggs (paid vs. infertile), age of donor, and history of previous pregnancy.

Results: Clinical pregnancies were achieved by 58.0% (68/119) of the recipients of paid donors with no previous history of pregnancy vs. 55.1% (220/399) with a history of previous pregnancy. For infertile donors the clinical pregnancy rate in recipients was 46.1% (24/52) vs. 62.3% (86/138), respectively. The comparable ongoing delivered pregnancy rates were 52.9% (63/119) vs. 51.1% (204/349) from paid donors and were 36.5% (19/52) vs. 52.9% (73/138) from infertile donors. The implantation rates from paid donors were 31.5% (105/333) with no history of pregnancy vs. 33.7% and from infertile donors 30.0% (44/147) vs. 35.1% (145/413). The clinical pregnancy rate from paid donors aged <30 was 56.8% (179/315) vs. 53.6% (109/203) for donor aged 31-35. For infertile donors the clinical pregnancy rates from donors aged <30 were 53.1% (42/79) vs. 61.2% (68/111) for infertile donors aged 31-35. Ongoing delivered pregnancy rate from these groups were 53.0% (106/315) vs. 49.7% (101/203) and 43.0% (33/79) vs. 53.1% (59/111). The implantation rate from paid donors <30 was 33.0% (277/838) vs. 31.6% (188/594) and from infertile donors 33.6% (78/232) vs. 33.8% (111/328). The only category showing a significant difference was the clinical pregnancy rate with no previous pregnancy vs. previous pregnancy (p=.035) from infertile donors. The ongoing delivery rates in the same category approached significance (p=.081).

Conclusion: Interestingly, donors aged 31-35 seem to produce similar pregnancy rates to donors aged <30. Eggs from infertile donors trying to conceive themselves, especially if they have been previously pregnant seem to produce similar successes in recipients as do eggs from paid donors.