significantly lower than Group B. The pregnancy rate(31.9% vs. 39.5%) and implantation rate(15.6% vs. 19.8%) were not significant different in both groups. In patients with age less than 40 (93 vs. 141 patients), the FSH dosage(2598±938 vs. 2179±523 IU; p<0.001), the E2 level on HCG day(980±775 vs. 1740±1152 ng/mL; p<0.001) and the number of retrieved oocyte(6.9±4.7 vs. 10.9±6.2; p<0.001) in Group A was lower than Group B. There was no difference in the pregnancy rate(39.7% vs. 41.8%) and implantation rate(16.2% vs. 19.9%).

CONCLUSION: From our study, co-treatment with GH in poor responders seems to achieve a satisfactory pregnancy outcome as well as normal responders.

P-1290 Thursday, October 17, 2013

ESTROGEN PRIMING GnRH ANTAGONIST REGIMEN IS AN EFFICIENT PROTOCOL IN POOR RESPONDERS. D. Özmen,[a,b] E. G. Pabuçcu,[a,c] M. Sönmezer,[a,b] C. Atabekoglu,[a,b] B. Berker,[a,b] R. Pabuçcu.[d,e] [a]Ankara University School of Medicine Department of Obstetrics and Gynecology, Ankara, Turkey; [b]Ankara University School of Medicine Center for Research on Human Reproduction, Ankara, Turkey; [c]Karaman State Hospital Department of Obstetrics and Gynecology, Karaman, Turkey; [d]Ufuk University School of Medicine Department of Obstetrics and Gynecology, Ankara, Turkey; [e]Centrum Clinic Women Health and IVF Center, Ankara, Turkey.

OBJECTIVE: To compare the fertility outcomes of 3 frequenlty used stimulation regimens for poor responder patients undergoing IVF/ICSI.

DESIGN: Retrospective cohort study.

MATERIALS AND METHODS: Computerized data of the selected patients who underwent COH for IVF/ICSI between 2009 and 2012 were retrospectively analyzed. After allocating subjects, 104 patients were selected as group 1 (microdose-flare protocol) (MF), 46 patients were selected as group 2 (aromatase inhibitor protocol) (AI) and 43 patients were selected as group 3 (luteal estrogen protocol) (LE).

RESULTS: Patient demographics, cycle characteristics, embryological data and cycle outcomes were both comparable. Only significant parameter was peak estradiol (E2) level whereas aromatase inhibitor group showed siginificantly lower peak E2 compared with both microdose flare and luteal estrogen priming group. Clinical pregnancy rates were similar along groups.

Outcomes of the study

(mean±sd)	Group 1: Microdose flare protocol (No: 104)	Group 2: Aromatase Inhibitor protocol (No: 46)	Group 3: Estrogen priming protocol (No: 43)	p value
Age (year)	36,1±5,8	36,6±6,2	34,5±5,7	ns
FSH (mIU/mL)	10,1±4,4	11,2±3,1	10,3±3,1	ns
AMH (ng/dL)	1,6±1,1	1,0±0,6	1,5±1,0	ns
No. of days of stimulation	11±2,6	10,9±2,5	11,7±2,4	ns
Peak E2 (pg/mL)	1564±703	839±534	1936±701	p<0,05
Cycle cancellation	25,7%	23,4%	26,9%	ns
Mean mature oocytes retrieved	4,5±3,1	3,6±1,7	4,2±2,6	ns
Fertilization rate (%)	78,8±21,0	84,3±22,2	82,8±19,1	ns
Clinical pregnancy rate (%)	19,2%	17,4%	25,6%	ns
Abortion rate (%)	16,2%	10,8%	8,6%	ns

ns: not significant.

CONCLUSION: This study revealed similar cycle outcomes among three most frequent stimulation protocols currently used in poor responders. Luteal estrogen priming protocol seems as effective as microdose flare and aromatase inhibitor protocols, which might be preferable due to lower cost.

P-1291 Thursday, October 17, 2013

IDENTIFIABLE RISK FACTORS FOR BREAKTHROUGH OVULATION DESPITE GnRH ANTAGONIST SUPPRESSION IN IVF CYCLES. L. Zakarin, D. Reichman, L. Meyer, O. Davis, Z. Rosenwaks. The Center for Reproductive Medicine and Infertility, New York Presbyterian- Weill Cornell Medical Center, New York, NY.

OBJECTIVE: To identify risk factors for breakthrough ovulation despite GnRH antagonist suppression in IVF cycles.

DESIGN: Retrospective Case Control.

MATERIALS AND METHODS: Patients with breakthrough ovulation as evidenced by rise in serum LH >15mIU/mL (at least 100% increase) associated with drop in E2 and cul-de-sac free fluid on ultrasound were identified following review of all cycles from 8/04-8/11. Patients were suppressed with 0.25mg Cetrotide or Ganirelix once the lead follicle reached 13mm or E2 surpassed 300pg/mL. Demographics for index patients (n=53) were compared against all antagonist cycles (n=10,810). As index patients were older than the general control group (40 vs. 38, p=0.0009), age-matched controls (allocation 1:50) were randomly selected to assess for additional risk factors. Statistical analyses via t-tests with $p < 0.05$ were considered significant.

RESULTS: Breakthrough ovulation despite antagonist therapy was rare (0.5% of cycles). Index patients experienced a 3-fold rise in LH (mean 21.9 mIU/mL from 7.3 mIU/mL) despite 4.2 days mean GnRH antagonist exposure. Mean E2 was only 583.1pg/mL despite premature ovulation occurring on day 11.5 of stimulation. Patients with breakthrough were older and had significantly lower ovarian reserve as evidenced by day 3 FSH, antral follicle count, and stimulation response.

	Index	Age-Matched Control	p-value
n=	53	2,650	
Age	40.2±3.0	40.2±3.0	1
BMI	25.5±6.3	23.3 ± 6.7	0.016
AFC	5.1±2.9	7.0±3.5	0.0001
Day 3 FSH	11.2±6.2	5.3±3.7	0.0001
Start Dose	534.0±122.5	454.2±148.4	0.0001
Days of Antagonist	4.2±1.7	3.9±1.7	0.26
Total Gonadotropins	5840.1±294.0	4134.8±2338.8	0.0001
Days of Stimulation (up to surge or trigger)	11.5±2.7	8.68±3.8	0.0001

Values= Mean ± SD.

CONCLUSION: Patients with markedly diminished ovarian reserve are an at-risk group for breakthrough ovulation despite GnRH antagonist down-regulation. Further study is required to determine whether patients with markedly diminished reserve subjected to prolonged stimulation would benefit from more suppressive doses of GnRH antagonists.

P-1292 Thursday, October 17, 2013

SYNERGISTIC EFFECTS OF ANDROGEN SUPPLEMENTATION AND FOLLICLE STIMULATING HORMONE (FSH) ON 3 CONSECUTIVE IVF CYCLES IN WOMEN WITH DIMINISHED FUNCTIONAL OVARIAN RESERVE (DFOR). D. H. Barad,[a,b] V. A. Kushnir,[a] A. Shohat-Tal,[a] E. Lazzaroni,[a] H.-J. Lee,[a] N. Gleicher.[a,b] [a]Center for Human Reproduction, New York, NY; [b]Foundation for Reproductive Medicine, New York, NY.

OBJECTIVE: Since in rodents androgens and FSH synergistically benefit small growing follicles, to investigate whether evidence for similar synergism can be developed in humans.

DESIGN: Retrospective controlled cohort study.

MATERIALS AND METHODS: We investigated oocyte yields in three consecutive in vitro fertilization (IVF) cycles in 85 women with DFOR, based on abnormal age-specific FSH (as-FSH) and/or anti-Müllerian hormone (as-AMH), either under continuous or interrupted FSH exposure. Patients were supplemented throughout with dehydroepiandrosterone (DHEA, 25 mg TID), starting at least 6 weeks prior to 1st cycle start, 68 with intercycle intervals < 120 days (continuous FSH, Group I) and 17 with ≥ 120 days (interrupted FSH, Group 2). Since patient selection criteria mandated 3 consecutive cycles, patients who conceived in 1st and 2nd cycles were not eligible for study participation. The study, therefore, only reports pregnancy rates for 3rd cycles.

RESULTS: A repeated measures mixed ANOVA found a significant interaction between Group assignment and cycle number on oocytes retrieved ($F = 6.32$, df = 2, 85.9, $P = 0.003$). Repeated measures ANOVA revealed a linear increase in oocyte yields for women in Group I across the three cycles of treatments ($F = 7.92$; df 1, 68.6; $P = 0.017$). Oocyte yields increased significantly with DHEA supplementation from 1st to 2nd (P=0.003) and 3rd (P=0.004) but not between 2nd and 3rd cycles. Group 2 patients, in contrast, experienced a nominal decrease in retrieved oocytes.