

chemo/radiotherapy, operating time, blood loss, findings, and complications were compared as were immediate postoperative complications and available follow-up to date. Chi-squared analysis, Student's t-test for paired groups and ANOVA were used as appropriate with $P < .05$ considered significant.

Results: The patients age ranged from 9–43 yr. Patients undergoing BMT were younger than patients undergoing OTC for breast cancer or GYN disease ($P < .001$). All patients had a serum FSH assay ≤ 30 mIU/ml, hematocrit of $\geq 30\%$, and a platelet count $\geq 60,000$. Patients undergoing prior chemo/radiation/hormonal therapy were similar in Group A (5 of 7) and Group B (10 of 13) ($P = \text{ns}$). Compared with Group B, LOB in Group A resulted shorter operating time (35 ± 4.1 vs. 52.7 ± 5.8 min, $P \leq .04$) and less estimated blood loss (23.6 ± 4.2 vs. 62.3 ± 12.5 ml, $P \leq .05$). There were no cases of hepatic/splenic enlargement or suspected pelvic/abdominal metastasis in either group. Histologic section at processing for OTC revealed either antral or primordial follicles in all cases. Postoperatively, no major complications were noted and the incidence of minor wound infection was similar between Group A and B (0/7 vs. 2/13, $P = \text{ns}$). On follow-up, two patients have died; one from graft vs. host disease one month following BMT, and one from complications of Hodgkin's disease 10 months from BMT. No patient has demonstrated spontaneous menstruation to date.

Conclusions: LOB performed for OTC may be safely performed immediately prior to planned cancer therapy, including BMT, without significant risk of complications which may delay or jeopardize treatment. Scheduling LOB weeks before cancer therapy may not be necessary, allowing for greater flexibility in utilizing OTC prior to sterilizing procedures in young women. LOB performed at the time of another procedure, such as central line placement, may have the advantages of shorter operating time, less blood loss, avoiding an additional anesthetic exposure, and decreased cost. PII S0015-0282(01)01714-9

O-7

Excessive Serum Testosterone Levels Are Found During Testosterone Replacement Therapy in Postmenopausal Women. C. C. Slater, F. Z. Stanczyk, C. Zhang, R. J. Paulson, D. R. Mishell, Jr. Department of Obstetrics and Gynecology, University of Southern California Keck School of Medicine, Los Angeles, CA.

Background: Both postmenopausal women (PMW) and women who have undergone bilateral oophorectomy have decreased androgen levels. Decreased T levels, specifically, have been associated with loss of energy, muscle wasting, depression, and loss of libido. In recent years, there has been considerable interest in treating these symptoms with T replacement. Although transbuccal and parenteral T formulations are prescribed to PMW, virtually no studies have been performed to determine serum T levels with these drugs.

Purpose: To determine serum levels of free and total T in PMW treated with two T formulations that are being described.

Materials and Methods: Ten bilaterally oophorectomized women were studied. Five women received an application of 1 mg of micronized T in a gel, and the others received a lozenge containing 1 mg of testosterone propionate daily for 2 weeks. Blood samples were obtained at baseline and 1, 2, 3, 4, 6, 8, 12, and 24 hours on treatment days 1 and 14. Total T was quantified by RIA following extraction and chromatography. Free T was calculated by a validated computer algorithm. A questionnaire regarding libido was given to each subject on days 1 and 14 of treatment.

Results: Maximum serum T concentrations ranged from 472 ng/dL to 1,004 ng/dL and 418 ng/dL to 1,275 ng/dL with the lozenge, and from 41 ng/dL to 225 ng/dL and 36 ng/dL to 331 ng/dL with the gel on days 1 and 14 of treatment, respectively. These levels were achieved 0–1 hours after dosing with the lozenge, and 4–18 hours after dosing with the gel. Serum free T concentration followed a serum profile similar to that of total T. Libido improved in 3 of the 5 subjects treated with the T gel, and showed no improvement with the T lozenge.

Conclusions: 1) Total and free T levels were found to reach upper male ranges with both T formulations; 2) sustained T levels were achieved with the gel but not the lozenge; 3) the effect on libido was better with the gel than the lozenge in this small pilot study; and 4) monitoring of serum T levels in patients receiving T replacement is essential. PII S0015-0282(01)01715-0

O-8

Pregnancy Outcome in Women 50 or More Years of Age: A Decade of Experience. R. Boostanfar, L. Sorenson, J. Ambroggio, J. K. Jain, C. C. Slater, M. M. Francis, R. J. Paulson. Department of Obstetrics and Gynecology, Division of Reproductive Endocrinology and Infertility, University of Southern California Keck School of Medicine, Los Angeles, CA.

Background: As a result of oocyte donation, women in their 6th decade of life are now able to conceive and carry pregnancies to term. However, there are limited data with respect to pregnancy outcomes in women 50 years and older.

Purpose: To describe the obstetrical outcomes of pregnancies in women 50 years of age and older undergoing IVF with donor oocytes.

Materials and Methods: A retrospective analysis encompassing calendar years 1991–2000. During this period, 72 postmenopausal women, aged 50 to 63 years, mean 52.9 ± 2.2 years, underwent IVF with donor oocytes. The outcome of these cycles were ascertained by chart review and telephone follow-up.

Results: Eighty-three aspirations resulted in 115 embryo transfers (83 fresh and 32 frozen cycles) with 56 clinical pregnancies (48.7%). There were 43 viable pregnancies (37.4%), of which 41 have delivered and 2 are currently in the third trimester, with 31 singletons, 11 twins, and 2 triplets (30.2% multiple gestation rate). Of the live births, 78% delivered by cesarean. Of the singletons, 69% delivered by cesarean, 7% by vacuum assisted vaginal delivery and 24% by normal spontaneous vaginal delivery. All multiple gestations delivered by cesarean. The mean gestational age at delivery for singletons was 38.6 ± 2.3 (30.6–41.6) weeks and the mean birth weight was $3,033 \pm 713$ (1,107–4,233) grams. For twin deliveries: 34.3 ± 2.7 (30–38.4) weeks and $2,179 \pm 646$ (1,222–3,011) grams, respectively. For triplet deliveries: 32.2 ± 1.2 (31.3–33) weeks and $1,913 \pm 436$ (1,165–2,500) grams, respectively. There were no neonatal or maternal deaths. Only one subject experienced premature rupture of membranes at 29 weeks of a singleton gestation and was hospitalized for 10 days until delivery. Mild pre-eclampsia was experienced by 18.8% of patients and severe pre-eclampsia by 9.4%. One subject required delivery of twins at 30 weeks of gestation for acute onset severe pre-eclampsia, but no patient had an eclamptic episode. Gestational diabetes was controlled by diet in 21.9% of patients and only 3.1% of patients required insulin. One patient underwent hysterectomy for a placenta accreta and one received a transfusion after a cesarean delivery for placenta previa.

Conclusions: Women 50 or more years of age experience pregnancy rates, multiple gestation rates, and spontaneous abortion rates that demonstrate uterine receptivity is not compromised with age. Furthermore, in spite of a high cesarean delivery rate and incidence of gestational diabetes and hypertension, perinatal outcome appears to be successful in carefully screened women 50 or more years of age undergoing advanced reproductive technologies with donor oocytes. PII S0015-0282(01)01716-2

O-9

Aromatase Inhibition Improves Ovarian Response to FSH: A Potential Option for Low Responders During Ovarian Stimulation. M. F. Mitwally, R. F. Casper. Mt. Sinai Hospital, University of Toronto, Toronto, Ontario, Canada.

Introduction: About 10–25% of infertility patients are poor responders to gonadotropins and their management includes increasing FSH dosage $\pm$ cotreatment with estrogens, growth hormone, contraceptive pills, and/or clomiphene citrate (CC). New reversible aromatase inhibitors (AI), including letrozole, have been developed for treatment of advanced breast cancer. Our hypothesis was that blockade of estrogen synthesis by an AI in the early part of the menstrual cycle would decrease estrogen negative feedback centrally resulting in increased gonadotropin secretion. Moreover, by blocking conversion of androgens to estrogens in the ovary, the accumulating androgens may increase follicular sensitivity through amplification of FSH receptor gene expression. The objective of this pilot study was to examine the use of letrozole with FSH for poor responders undergoing ovarian superovulation and intrauterine insemination (IUI).

Patients and Methods: Eight patients with unexplained infertility undergoing IUI received hFSH from cycle day 3 and were considered poor responders (<3 dominant follicles) during 16 FSH-only cycles. They were offered letrozole 2.5 mg/day from day 3 to day 7 of the