

obesity is associated with an increased SAB rate even in women using ovum donation. This suggests that obesity predisposes women to miscarry genetically normal embryos. The purpose of this study is to better understand the affect of obesity by examining the cytogenetic results of miscarriages in relation to maternal weight and insulin resistance.

DESIGN: Retrospective case-control study.

MATERIALS AND METHODS: Women with first trimester missed abortion who underwent D&C between 1999 and 2008 were included if they had karyotype analysis of products of conception. Medical records were reviewed for demographics, BMI, Insulin Resistance Testing (IRT), and diagnosis of PCOS. IR was defined as insulin values of ≥ 100 U/mL two hours after a 75 gm oral glucose load. Exclusion criteria were age ≥ 40 , diabetes, use of donor eggs or PGD. Chi square and Student's t test were used for statistical analysis.

RESULTS: A total of 204 miscarriages were included, with a mean age of 34.5. The overall rate of aneuploidy was 59%. Women with BMI ≥ 25 had a significant increase in euploid miscarriages compared to women with lower BMI, despite similar mean ages (34.4 for both). In addition, women with PCOS had a non-significant trend toward increased euploid miscarriage. IR patients had a similar rate of aneuploidy in their miscarriages as women with normal testing. However, 22 of 23 IR patients were taking insulin lowering medications at the time of conception.

CONCLUSIONS: We found a significant increase in normal karyotypes in miscarriages of overweight women (BMI ≥ 25). This suggests that with reduction of pre-pregnancy weight these women may decrease their risk of euploid miscarriage. Further studies are needed to assess the impact of lifestyle modification and insulin lowering medications on pregnancy outcomes in the overweight and obese population.

TABLE 1.

Factor	Total N	Normal Karyotype	Abnormal Karyotype	P value
Age				
<35	93	50.5% (47)	49.5% (46)	
≥ 35	111	32.4% (36)	67.6% (75)	0.009
BMI				
<25	153	36.6% (56)	63.4% (97)	
≥ 25	51	52.9% (27)	47.1% (24)	0.040
PCOS				
No	156	38.5% (60)	61.5% (96)	
Yes	48	47.9% (23)	52.1% (25)	0.244
IR				
No	39	43.6% (17)	56.4% (22)	
Yes	23	43.5% (10)	56.5% (13)	0.993
RPL				
No	173	41.0% (70)	59.0% (102)	
Yes	30	40.0% (12)	60.0% (18)	0.915

Supported by: None.

Monday, November 10, 2008
5:00 pm

O-21

CARRIERS OF THE MINOR ALLELES FOR FOLLICLE STIMULATING HORMONE (FSH) RECEPTOR I (G_G) AND II (C_C) HAVE INCREASED BASAL FSH LEVELS BUT NO DIFFERENCE IN OVARIAN RESPONSIVENESS OR CLINICAL OUTCOMES.

M. Hedayatzadeh, X. Tao, L. E. Northrop, E. Bergh, N. Treff, R. T. Scott. UMDNJ- Robert Wood Johnson Medical School, Reproductive Medicine Associates of New Jersey, Morristown, NJ; Reproductive Medicine Associates of New Jersey, Morristown, NJ.

OBJECTIVE: FSH receptor (FSHR) polymorphisms have been associated with increased circulating basal FSH levels and diminished follicular response. This study seeks to determine the relationship of these changes to clinical outcome.

DESIGN: Prospective observational.

MATERIALS AND METHODS: DNA was obtained from 1452 patients doing their first IVF cycle. Assays: Each sample was assayed in duplicate for FSHR 1 (rs6165) and FSHR 2 (rs6166) single nucleotide polymorphisms (SNP's) using Taqman genotyping and quantitative real-time PCR. Analysis: ANOVA analysis compared FSHR1 and FSHR2 polymorphism distribution

to 3 groups of endpoints: 1. Endocrine state - max prior basal FSH level; 2. Measures of follicular response - total gonadotropin dose, peak E₂ level, mature follicles, and oocytes retrieved; and 3. Measures of oocyte quality - fertilization rates, supernumary embryos, and clinical pregnancy rates. Evaluation of pregnancy by max prior basal FSH level was also done to see if the predictive value of basal FSH screening is impacted by the presence of the various SNP's.

RESULTS: Across genotype distribution, carries of the minor allele for FSHR1 (G_G) and FSHR2 (C_C) showed significantly higher levels of FSH compared to major allele carriers. There were no differences in quantitative parameters of follicular stimulation or qualitative indices of oocyte quality including clinical pregnancy rates.

TABLE 1

Clinical Outcomes	FSH_R1			FSH_R2		
	A_A	G_A	G_G	T_T	C_T	C_C
FSH Level	7.7	8.3	8.8*	7.76	8.38	8.9*
GND Dose (75 IU increments)	39	40	41	38	40	41
Peak E2 (pg)	1978	1872	1865	1969	1880	1839
Follicle Count	14	13	13	13	13	14
No. of Oocytes	15	14	14	15	14	14
Fertility Rate	80 \pm .9	80 \pm .7	79 \pm 0.9	79 \pm .9	80 \pm .7	79
Supernumary Embryos	3.6	4.0	4.4	3.7	4	4
Pregnancy Rate: Y/N	48/52	54/46	58/42	48/52	45/55	44/56

* Signifies genotype minor alleles (G_G & C_C) significantly higher FSH compared to major allele groups.

Evaluation of the predictive value of maximum prior basal FSH levels showed no differences with small numbers in some groups.

TABLE 2

Pregnancy Rate (N;%)	FSH Level Group			
	<12	12-15	15-18	18+
FSHR1				
Genotype	A_A 64/342	2/16	3/11	2/4
	G_A 127/625	7/60	2/22	0/5
	G_G 38/272	5/26	0/11	1/6
FSHR2				
Genotype	C_C 35/227	5/22	0/9	1/6
	C_T 125/625	7/62	2/22	0/5
	T_T 68/376	2/16	3/11	2/4

CONCLUSIONS: Common polymorphisms of the FSHR impact basal FSH levels, but do not impact clinical performance or outcomes. Larger numbers of patients will be required to determine if changes in outcomes accompany the small rise in basal FSH levels observed. These studies are ongoing.

Supported by: EMD Serono.

MENTAL HEALTH PROFESSIONAL GROUP

Monday, November 10, 2008
3:15 pm

O-22

WHO REQUESTS THEIR SPERM DONOR'S IDENTITY? ANALYSIS OF DONOR-CONCEIVED ADULT REQUESTS AT AN OPEN-IDENTITY PROGRAM.

J. E. Scheib, A. Ruby, J. Benward. University of California & the Sperm Bank of CA, Davis, CA; The Sperm Bank of California, Berkeley, CA.

OBJECTIVE: Open-identity donation offers adult offspring the option to obtain their donor's identity. We report findings from a study of planned information-releases to donor-conceived adults.

DESIGN: Archival analysis; interviews.

MATERIALS AND METHODS: Using interview data from information-releases and archival data about program families, we addressed who wants their donor's identity, when and how long releases take, demographic predictors of making requests, and motivations for obtaining information. Analyses used chi-square tests.

RESULTS: Since the first release 6 years ago, 37/142 (26.1%) eligible adults requested donor information. With adjustment for a 70% heterosexual-couple disclosure rate, about 30% of adults made requests. Once started, 77.8% obtained their donor's identity. Median time to complete the process was 28 days; 70% completed in 6 mos. Eligible offspring ranged from 18–25 years old, but median requesting age was within a month of turning 18. If urgency existed about getting information, we expected requests to be made at ages 18-19. Indeed among older requesters (20 yrs+), all but one requested information before age 20, suggesting there may be at least two groups of requesters: those who want information as soon as possible, and those who get it later in life. More women (56.8%) than men requested information, with gender predicting requests ($X_{12}=4.6, p<.05$). Almost half of all requesting adults (48.6%) were raised by lesbian couples, 31.4% by single women and 20% by heterosexual couples, with adults from single-parent families predicting requests ($X_{22}=8.6, p<.05$). Having two parents appeared to deter requests ($X_{22}=3.9, p<.05$), perhaps from concern for coparents. But when adjusted for non-disclosure, family-structure effects weakened ($p's>.1$). With rates adjusted, information was requested by 34% of eligible adults raised by lesbian couples, 44% raised by single women and 20.6% raised by heterosexual couples. At least half of adults went on to contact and meet their donor, reflecting interviews at information-release.

CONCLUSIONS: Results suggest some urgency for wanting to know who the donor is among nearly one-third of adults. More women requested than men, similar to adoption. Adults with single parents were overrepresented among requesters, but effects weakened when adjusted for non-disclosure. Many adults met their donor and from initial reports, the experience has been overwhelmingly positive.

Supported by: Gay & Lesbian Medical Association; Lesbian Health Fund; UC Davis Consortium for Women & Research.

Monday, November 10, 2008
3:30 pm

O-23

THE DISPOSITION DECISION: HOW COUPLES WHO HAVE UNDERGONE IVF DECIDE WHAT TO DO WITH SURPLUS FROZEN EMBRYOS. R. Nachtigall, K. MacDougall, J. Harrington, J. Duff. Department of Obstetrics and Gynecology, University of California, San Francisco, San Francisco, CA; Institute of Health and Aging, University of California, San Francisco, San Francisco, CA.

OBJECTIVE: Research indicates that the majority of patients who have undergone IVF have difficulty in deciding what to do with surplus frozen embryos. This study describes how couples approach this disposition decision.

DESIGN: Qualitative interview study.

MATERIALS AND METHODS: In-depth semi-structured interviews were conducted with 104 women and 81 men. Couples had an average of 6 frozen embryos stored for an average of 4 years. Interviews were recorded, transcribed, coded, and analyzed thematically.

RESULTS: In making their decision, couples addressed three sequential questions: (1) Will the embryos be used for additional attempts at conception? Influencing factors included family finances, the age and health of the parents and children, the size and configuration of the family, and the number and quality of the embryos; (2) Will the embryos remain in storage? Although some embryo storage was the result of indecision or couple disagreement, deliberate storage was appealing to many. Embryos were considered a valuable or useful resource and storage was perceived as enabling the possibility for additional conceptions and/or other therapeutic uses for the embryos in the future. However, increasing storage fees often led to disposition; (3) Will the embryos be donated or destroyed? Donating embryos was generally felt to reflect the ethical values of responsibility, altruism, and reciprocity. Donation to science was influenced by the couples' basic knowledge and understanding of science and was encouraged most strongly by balanced and comprehensible information from the clinic or physician provider. Donation to others was undermined by (a) concerns related to perceived kinship ambiguities and responsibilities, and (b) the prospect of uncertain financial, legal, and medical burdens for the donating couple because of the perceived lack of a defined infrastructure to facilitate donation. The decision to discard embryos resulted from apprehension over potential embryo mix-up or misuse, couple disagreement, or the desire for an unambiguous outcome.

CONCLUSIONS: Couples did not seriously consider embryo disposition until the question of whether the embryos would be used in further attempts at conception was resolved. Indefinite embryo storage was appealing as it maintained reproductive options and preserved the value and utility of the

embryos for possible future use. Detailed information and guidance as well as increasing storage fees motivated couples to make and implement embryo disposition decisions.

Supported by: NICHD HD45429.

Monday, November 10, 2008
3:45 pm

O-24

MENTAL MODELS OF TREATMENT DECISIONS IN WOMEN CONSIDERING ASSISTED REPRODUCTIVE TECHNOLOGIES. S. G. Millstein, L. Pasch, P. Katz, R. Nachtigall, N. Adler. Pediatrics, University of California-San Francisco, San Francisco, CA; Psychiatry, University of California-San Francisco, San Francisco, CA; Medicine, University of California-San Francisco, San Francisco, CA; Obstetrics and Gynecology, University of California-San Francisco, San Francisco, CA.

OBJECTIVE: Decisions about whether to pursue fertility treatment are made under conditions of significant uncertainty and stress. In this study we address women's mental models of these decisions, how they frame the decision making task, the approach they use to resolve it, and the complexity inherent in the decision task itself.

DESIGN: Patients seen for an initial consultation visit at one of 8 infertility practices in Northern California were recruited for a longitudinal study on infertility; this report focuses on baseline data collected within six weeks of the consultation.

MATERIALS AND METHODS: Face-to-face, semi-structured interviews were conducted with 417 women (ages 21-52; 75% Caucasian). Women were queried on options they were considering, decisions made, backup plans if treatment was unsuccessful, and subsequent decision tasks that might occur later in the process of infertility treatment.

RESULTS: We identified three groups of patients. "Completers" (72% of sample) had made decisions about treatment options and left nothing undecided; 84% of them had backup plans if treatment was unsuccessful. "Contemplators" (13%) had made no decisions about next steps and were actively considering treatment options; 51% had backup plans. A "Mixed" group of women (16%) made a provisional treatment decision, based on obtaining further information; 72% had backup plans. Decision tasks were considered to be less complex when participants had all the information they needed to make a decision (69% of sample). In more complex decision tasks, where women were waiting for information (e.g., lab results) that they felt would have an impact on their treatment decisions (31% of sample), women were less likely to have made decisions (67% versus 83%), saw more value in considering all potential outcomes before making decisions ($p<.001$), and viewed the decision making process as more difficult ($p<.05$). Backup plans were present in 17% of contemplators facing complex decision tasks, compared to 92% of completers facing similar tasks.

CONCLUSIONS: Women presenting for fertility treatment evidence distinctly different ways of approaching the decisions they face. In addition to providing a rich description of the decision environment for patients, the creation of empirically derived measures of the decision making process will allow us to examine their effects on patients over the course of infertility treatment.

Supported by: Research was supported by NICHD 5P01HD037074, NIMH T32MH019391 and DHHS MCJ000978.

Monday, November 10, 2008
4:00 pm

O-25

PHYSICIAN PERSPECTIVES ON THE ETHICS OF SEX SELECTION: A COMPARISON OF THE ATTITUDES OF PRIMARY CARE PROVIDERS AND SEX SELECTION TECHNOLOGY PROVIDERS. S. Puri, R. D. Nachtigall. School of Medicine, University of California, San Francisco, San Francisco, CA; Department of Obstetrics and Gynecology, University of California, San Francisco, San Francisco, CA.

OBJECTIVE: The use of reproductive technology for the purpose of sex selection is controversial. This pilot study contrasts the perspectives of primary care physicians (PCPs) and physician sex-selection technology providers (SSTPs) about the ethics of sex selection.

DESIGN: Ethnographic, qualitative interview study.