currently experiencing any additional anxieties related to this pregnancy that have not previously been asked?" Descriptive statistics and Cronbach's alpha were calculated on the PRAM and content analysis was conducted on the open-ended question responses.

RESULTS: 144 subjects completed the PRAM. 31 subjects provided a narrative response to the question. The average score of the PRAM was 20.49 (SD=5.96) and demonstrated higher scores than non-IVF, non-high-risk pregnant populations. Several themes emerged from the content analysis including anxiety about the health of their unborn baby(ies), anxiety about their own health and safety, anxiety about women's perception of their own ability in the role of mother, and anxiety about finances.

CONCLUSION: Women who conceive via IVF experience increased anxieties specific to the pregnancy. Content analysis of narrative responses confirmed some of the findings of the PRAM. This research is an important step in better understanding this patient population and helps inform REI and Obstetrical nursing practice when caring for women pregnant via IVF.

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P-5 Tuesday, October 23, 2012

THE EFFECT OF GUIDED IMAGERY TO REDUCE PAIN AT THE TIME OF IN VITRO FERTILIZATION EGG RETRIEVAL: A RANDOMIZED CONTROLLED TRIAL. Y. Nagaoka. Ibaraki Prefectural University of Health Sciences, Inashiki-County, Ibaraki, Japan.

OBJECTIVE: This study was undertaken to clarify the effects of guided imagery on subjective pain at the time of egg retrieval in infertile women undergoing IVF treatment.

DESIGN: Randomized single-blind study.

MATERIALS AND METHODS: The study candidates were inpatients receiving treatment in a private IVF clinic in Kanagawa, Japan. After passing the IRB, 91 eligible women were randomized into an imagery group (IG) (n=45), in which the intervention primarily consisted of listening to an imagery CD (20 min), or a music group (MG) (n=46), whose primary task was to listen to a music CD.Interventions were conducted 3 times at the clinic: (i) at the start of treatment, (ii) the 7th days, and (iii) on the night before egg retrieval. Visual Analog Scale (VAS) was used to measure subjective pain. The data analysis was carried using SPSS and t-test.

RESULTS: 1. In total, 6 out of the 91 women (9.9%) withdrew from the egg retrieval.

- 2. The VAS scores for pain during egg retrieval were  $55.72\pm26.78$ (n=44) for the IG and  $62.53\pm20.34$ (n=41) for the MG; no significant difference was observed (t=-1.33, P=0.189). In addition, there was no significant difference observed between the two groups in the VAS score 90 min after egg retrieval.
- 3. In this study, because the number of times participants listened to the CD at home differed, subgroup analysis was carried out on the 'high-frequency listening group', which listened to the CD twice or more in a three-day period up until the egg retrieval, and the 'low-frequency listening group'. The VAS scores at the time of egg retrieval for the high-frequency group were  $45.96\pm26.05$  (n=25) for the IG and  $63.98\pm21.64$  (n=29) for the MG. Scores were significantly lower in the IG (t=-2.74, P=0.009).

CONCLUSION: Results of the study suggest that confidence and a sense of security brought on by egg-retrieval image training and the implementation of guided imagery raised the pain threshold. Guided imagery can be used as a nursing care for women undergoing IVF.

Supported by: Fumiko Yamaji professional nursing educational research fund.

## OVARIAN RESERVE

P-6 Tuesday, October 23, 2012

ANDROGEN RECEPTOR POLYMORPHISMS ARE ASSOCIATED WITH POOR OVARIAN RESPONSE, J. Llacer, J. A. Ortiz, J. Guerrero, B. Lledo, J. Ten, R. Bernabeu, Reproductive Medicine, Instituto Bernabeu, Alicante, Spain; B Biotech, Instituto Bernabeu, Alicante, Spain.

OBJECTIVE: To evaluate the association of Androgen Receptor (AR) polymorphism and Poor Ovarian Responders (POR).

DESIGN: Observational case-control study.

MATERIALS AND METHODS: Number of repeats CAG in the exon 1 the AR gene was assessed in 56 women involved. We include 20 in the POR group, all were under 36 and met the criteria to consider POR in our institution (2 of the following criteria: AMH levels<1 ng/ml, AFC less than 6 and one or more cycles cancelled for low response or with less than 5 eggs collected using standard doses of gonadotropins). The control group consisted of 36 women with proven fertility and that both the antral follicle count and AMH levels are normal. DNA is purified from peripheral blood lymphocytes or buccal swabs. The CAG repeat region in the AR is amplified by fluorescent PCR and analyzed by capillary electrophoresis (ABI PRISM 310, Applied Biosystems). Two-tailed X2 test was used to compare allelic frequency between POR and control group.

RESULTS: Women with POR showed a maximum number of repeats at the beginning (19 CAG repeats) that decreases slowly over the interval. On the other hand, the control group showed a maximum mid-range (21 CAG repeats) with two tails along which decreases relative frequency. The relative frequency in distribution of number CAG repeats in POR group is shifted to the right, compared to controls. Only 15% of the group of patients have alleles with repeat number below 20, compared with 50% of controls (P<0.05).

CONCLUSION: Women labelled as POR have a number of CAG repeats in exon 1 of AR significantly higher than the control group. These results suggest that this polymorphism would affect ovarian function and therefore the activity of de receptor could be related to ovarian response. This fact could explain the improvement in ovarian response with androgen priming published so far. Polymorphisms in AR gen are candidates to explain some cases of POR.

Supported by: Supported by Instituto Bernabeu.

P-7 Tuesday, October 23, 2012

CORRELATION BETWEEN ANTI-MULLERIAN HORMONE AND NUMBER OF CGG REPEATS. E. Cervantes, M. Luna, G. Vela, M. Whitehouse, B. Sandler, A. B. Copperman. A. B. Reproductive Medicine Associates of New York, New York, NY; BObstetrcis, Gynecology and Reproductive Science, Mount Sinai School of Medicine, New York, NY.

OBJECTIVE: Approximately 20% of patients who are FMR1 premutation carriers present with premature ovarian failure (POF) compared to 1% of the general population (Gallagher, 2012). The risk of POF in female carriers appears to increase with increasing CGG repeat size up to 99, after which the risk plateaus or decreases for women with repeat size>100 (Uzeil, 1999; Wittenberger, 2007). Recently, Anti-Mullerian hormone (AMH) has been evaluated as a novel clinical marker of follicular reserve in the prediction of quantitative oocyte response (La Marca, 2010). Therefore we conducted this study to evaluate whether there was a correlation between low AMH levels and the number of CGG trinucleotide repeats.

DESIGN: Retrospective data analysis.

MATERIALS AND METHODS: Women with clinical suspicion of diminished ovarian reserve (DOR) who had completed both fragile X screening and AMH determination between 2008 and 2012 were included for analysis. AMH levels and CGG repeats in the study population were correlated regardless of age. A second correlation for both variables was performed in selected patients with an AMH<1 ng/ml and ≤38 years of age. Pearson correlation was used for testing.

RESULTS: A total of 74 patients with both AMH testing and fragile X screening were included for analysis. The mean age of the study population was  $38.3\pm4.5$  yrs. The mean AMH level and CGG repeats were  $1.2\pm1.4$  ng/ml and  $32.4\pm5.7$  repeats, respectively. The first correlation analysis, which included all patients regardless of age and AMH level, revealed a trend towards a greater number of CGG repeats as AMH levels decreased ( $P\!=\!0.0793$ ). Forty patients met criteria of being  $\leq 38$  years (mean  $35.5\pm2.8$  yrs) and AMH < 1 ng/ml (mean  $0.44\pm0.26$ ), however no correlation no trend was found to CGG repeat size (mean  $32.7\pm5.8$  repeats) ( $P\!=\!0.1178$ ).

CONCLUSION: AMH is an important prognostic variable in counseling and treating patients in a reproductive setting. We have confirmed that the FMR1 premutation is both predictive of and correlated with reproductive potential.

P-8 Tuesday, October 23, 2012

**OVEREXPRSSION OF UROMODULIN-LIKE 1 ACCELERATES OVARIAN AGING.** W. Wang, Y. Tang, L. Ni, E. J. Kim, H.-C. Liu, Z. Rosenwaks. CRMI Endocrine Research Laboratory, Weill Medical College of Cornell University, New York, NY.