ALTERED AUTONOMIC NERVOUS SYSTEM ACTIVITY EVALUATED BY HEART RATE VARIABILITY AMONG WOMEN WITH SEVERE PREMENSTRUAL EMOTIONAL DISTRESS. T. Matsumoto, T. Hayashi, T. Kimura, T. Moritani. Department of Education, Faculty of Education, Shitennoji University, Habikino, Osaka, Japan; Graduate School of Human and Environmental Studies, Kyoto University, Kyoto, Kyoto, Japan.

OBJECTIVE: Premenstrual syndrome (PMS) describes a range of physical, emotional, and behavioral symptoms occurring during the luteal phase. Although PMS is widely recognized, research has not yet clarified its etiopathogenesis. This study investigated whether autonomic nervous system (ANS) activity—a vital player in orchestrating human homeostasis—changed during the menstrual cycle of women with PMS. We also evaluated personality traits as possible agents affecting susceptibility to PMS.

DESIGN: A within- and -between-subjects study.

MATERIALS AND METHODS: This study involved 71 women with regular menstrual cycles. We examined all subjects during the follicular and luteal phases and assessed resting ANS activity by heart rate variability (HRV) power spectral analysis. The Menstrual Distress Questionnaire (MDQ) evaluated subjects’ menstrual cycle symptoms. We administered the Yatabe-Guildford Test and the Alexithymia Scale to assess subjects’ personality traits and divided subjects into either Control or PMS group, depending on severity of symptoms.

RESULTS: Total MDQ scores increased by 67.6% from the follicular to the luteal phase in the PMS group. Psychological factors (negative affect, behavioral change, and concentration) revealed the most remarkable changes between menstrual phases. Total power and high-frequency power—reflecting overall autonomic and parasympathetic activity, respectively—markedly decreased regardless of menstrual cycle in the PMS group compared to the Control group. None of the subjects expressed the alexithymic trait; the PMS group showed other traits, such as cyclic tendency, lack of cooperativeness, and aggressiveness.

CONCLUSIONS: This study suggests decreased ANS activity regardless of menstrual cycle in women with severe premenstrual emotional distress. The study also implies that specific psychosocial factors may induce unfavorable mind-body interaction, especially premenstrually.

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OBJECTIVE: Oocyte donation (OD) was once a treatment for severely compromised ovarian function and more readily accepted by younger women for treatment of pathologic causes of diminished ovarian reserve, but as OD becomes more socially accepted, older women with diminished fertility from aging are more open to OD to initiate pregnancies. Since these women are more likely to choose donors to achieve a lifestyle rather than be satisfied with the possibility of initiating any pregnancy, desired donor characteristics may change. To assess this, we compared recipient candidate demographics.

DESIGN: Retrospective review in a private OD program.

MATERIALS AND METHODS: 61 recipient candidates from 2002-04 were compared to 73 from 2008 by age, partner’s age, marital status, religion and donor characteristics sought. Requests for intelligence, attractiveness, religious affiliation, similar ethnic background and similar looks to recipient were recorded. One clinician conducted all interviews, and the questionnaire remained unchanged during the study period. T-tests and χ² tests were applied using AnalyzeIT.

RESULTS: No difference in recipient age (41.4±4.7 vs. 41.7±4.9, p=0.75), partner age (42.2±8.6 vs. 42.2±7.4, p=0.97), marital status (married 87% vs. 77%, single 5% vs. 8%, same sex partner 2% vs. 3%, unmarried partner 7% vs. 12%, p=0.53), or religion (p=0.11). Demands for donor requirements were increased for intelligence (22% vs. 71%, p<0.0001) and similarity of background (13 vs. 47%, p<0.0001), but decreased for attractiveness (18% vs. 6%, p=0.04). There was no difference in requirement for similar looks to recipient (p=0.20) or religion (p=0.85).

CONCLUSIONS: Requests for specific donor characteristics change as does the “ideal” donor. As OD becomes more common to extend fertility, there may be an effect on favored donor characteristics. Psychological counseling and emotional support are imperative for OD candidates. Continued evaluation of these trends may assist optimization of donorrecipient matching.


OBJECTIVE: To explore the experience, satisfaction and attitudes of ovum donors post egg retrieval.

DESIGN: Anonymous ovum donors received a survey immediately post egg retrieval to be returned within a week after the procedure.

MATERIALS AND METHODS: A survey utilizing Likert scale questions was based on areas of inquiry about donors’ experiences; 75 surveys were returned. Descriptive statistics were derived for all data. Pearson’s correlation coefficient and the nonparametric Kendall’s tau methods assessed significance of correlations between variables.

RESULTS: Donors were very happy about donating (92%) and never wished they had not donated (90.7%). The more prepared the donors felt, the better their experience both medically (p<.0002) and psychologically (p<.001). If donors had a positive experience, they were more likely to donate again (p<0.001). Most donors (70.7%) would like to know the outcome. Donors occasionally think about their donated eggs (58.7%),