Title
MID-SECRETORY EUTOPIE ENDOMETRIUM IN INTRAMURAL FIBROIDS AND SEVERE ENDOMETRIOSIS: RELEVANCE TO FERTILITY.

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predictive power in oocyte donor age for recipient outcome, some showing no difference and others describing a reduction in outcome from very young donors. This study aims to establish if oocyte donor age can predict the recipient outcome.

DESIGN: Standard oocyte recipient cycles from four private ART clinics between January 2008 and December 2013 were retrospectively reviewed and analysed for number of oocytes retrieved, maturity, fertilisation, achievement of an embryo transfer (ET), clinical pregnancy rate/ET (CPR), implantation rate (IR) and live birth rate/ET (LBR), based on oocyte donor age.

MATERIALS AND METHODS: 1229 cycles were divided into 8 groups based on oocyte donor age of 2 year intervals; 20-21(n=14), 22-23(n=37), 24-25(n=82), 26-27(n=111), 28-29(n=148), 30-31(n=238), 32-33(n=266), 34-35(n=329). Significance was determined using a Z-test of two proportions; a significance value of 0.05 and two tailed hypothesis.

RESULTS: No significant difference was apparent in embryological parameters assessed up to ET along with CPR, IR and LBR within the groups; a decrease in the third later was seen in groups 28-29 and 34-35. Combining the two upper age groups and comparing to the two lower to increase the n number also did not show significance CPR: 41.2% (7/17), 41.9% (13/31), 36% (27/75), 36.9% (38/103), 30.8% (44/143), 39.5% (88/223), 38.4% (93/242), 33.4% (100/299) respectively according to the above age groups. IR: 26.5% (9/34), 28.8% (17/59), 25.5% (38/146), 23.5% (47/200), 21.8% (60/275), 28.3% (121/427), 24.9% (118/473), 22% (128/582) respectively. LBR equaled the CPR up until the age of 25, after which miscarriages occurred. LBR: 34.9% (36/103), 26.6% (38/143), 34.5% (77/223), 33.1% (80/242), 27.8% (83/299) respectively.

CONCLUSIONS: No statistical difference was seen in outcome parameters of oocyte recipient cycles based on oocyte donor age. It should be noted that the 8 groups have an uneven number of cycles included which may affect data analysis. Those with a greater number of cycles are likely to be more reflective of the true result. As one of the largest studies so far published, it is reassuring to note that the age range provided by the HFEA guidelines shows no significant variation in the incidence of live Birth.

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OBJECTIVE: Data are conflicting on the expression of endometrial receptivity markers in women with intramural uterine fibroids and the effect of on fertility. We aimed to investigate the mid-secretory phase (MSE) endometrial transcriptome of women with intramural fibroids and compare them to controls and those with severe endometriosis.

DESIGN: In silico and laboratory-based study.

MATERIALS AND METHODS: Well-annotated endometrial tissue samples were obtained through the UCSF/NICHD Human Endometrial Tissue Bank. MSE samples were from 8 women with no uterine/endometrial pathology, 4 with intramural fibroids (no submucosal component) and 8 with severe endometriosis. Purified total RNA was subjected to microarray analysis with Gene 1.0 ST Affymetrix platform. Data were analyzed with GeneSpring and Ingenuity Pathway Analysis. Menstrual cycle phase was assigned by endometrial histology, estrogen/progesterone levels and bisinomarkistics methods. Microarray analysis validation was performed with Fluidigm array and real-time PCR.

RESULTS: Intramural fibroid MSE samples clustered separately from the control or endometriosis MSE. Comparison of differentially regulated genes revealed dysregulation of 1496 genes (989 up and 506 down) in endometrial samples from women with intramural fibroids vs. controls, 244 genes (139 up and 105 down) in severe endometriosis vs. controls and 1936 (1232 up and 704 down) in fibroid vs. endometriosis samples. Comparison of the gene lists above with the 238 Endometrial Receptivity Aarray (ERA) genes (Diaz-Gimeno et al, 2011) showed that only 8 and 1 genes were dysregulated gene lists above with the 238 Endometrial Receptivity Aarray (ERA) genes

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