displays the genetic lesion that characterizes fragile X-affected patients, having a full mutation (at least 285 CGG repeats). When injected into immunocompromised mice, various types of differentiated cells were found in the teratomas.

CONCLUSION: The successful derivation of HEFX1 cell line opens a new avenue for the scientific study of the molecular basis of fragile X syndrome. This work represents the feasibility and importance of deriving human ES cell lines from genetically abnormal pre-embryos, especially in cases where no suitable cellular and/or animal models are available.

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Wednesday, October 19, 2005
3:45 p.m.

O-259

ICMART World Collaborative Report on In Vitro Fertilization 2000. G. Adamson, P. Lancaster, J. De Mouzon, K. Nygren, E. Sullivan, F. Zegers-Hochschild. Fertility Physicians of Northern California, Palo Alto, CA; School of Women's and Children's Health, University of New South Wales, Sydney, Australia; INSERM U569, Hopital de Bicetre, Le Kremlin Bicetre Cedex, Paris, France; IVF Unit, Sophiahemmet Hospital, Stockholm, Sweden; Unit of Reproductive Medicine, Clinicas las Condes, Santiago, Chile.

OBJECTIVE: To present the results of IVF from different countries and regions of the world for the year 2000.

DESIGN: Retrospective survey of regional, national and individual clinic registers of IVF results.

MATERIALS AND METHODS: Data forms were re-designed by the International Committee for Monitoring Assisted Reproductive Technology (ICMART) based on experience with previous surveys. Multiple communications were utilized to identify regional registers, national organizations and individuals who could provide data. Data forms with instructions were sent in English to those who responded. Returned surveys were collated, organized and analyzed using sums, percentages, means and regression analysis.Data were collected from individual country summaries and not by individual patients. Pregnancy rates and delivery rates were calculated per aspiration.

RESULTS: 1,429 clinics in 49 countries reported, representing approximately 2/3 of the 2,200 IVF clinics in the world, an increase of 20% since 1998. The mean center's activity varied greatly, with many small centers with less than 100 cycles in Latin America (48%) and North America (35%) compared to Europe (15%), whereas centers with more than 500 cycles for those regions respectively were 7%, 12% and 37%. The clinics reported 367,731 aspirations, 52,875 frozen embryo transfers (FET) (+4%), and 14,848 oocyte donor transfers (+28%); this was an increase in all procedures of 10% from 1998. IVF aspirations were 191,109 (+5.5%) and ICSI aspirations 175,147 (+17%). Only GIFT cycles decreased from 3,482 to 1,475. The cycle cancellation rate was at least 10%. Europe represented by far the largest activity with 207,004 aspirations and 40,154 FET. For conventional IVF average pregnancy rate (PR) and delivery rate (DR) were 26.7% and 18.6% respectively. For ICSI, average PR and DR were 27.7% and 20.4%, respectively. The 1998 DR for IVF and ICSI, respectively, were 19.1% and 18.9%. On a world basis, 49.4% of the women were over age 34 and 14.4% over 39. For ICSI the figures were 47.4% and 14.2% respectively. The pregnancy loss rate was 26.5% for IVF and 26.3% for ICSI. The mean number of embryos transferred decreased from 1998 for both IVF (2.83 to 2.51) and ICSI (2.80 to 2.65). The proportion of twin pregnancies remained essentially unchanged from 1998 at 26.9% for IVF and 26.2% for ICSI. Triplet pregnancies were unchanged at 2.8% for IVF and 2.9% for ICSI. The triplet rate was closely associated with the number of transferred embryos, but the pregnancy rate was not, except in the United States and Chile. For FET, the cancellation rate between thaw and transfer was 13.2%. PR and DR were 16.6% and 12.0 % per transfer. Oocyte donation had a higher PR and DR at 41.9% and 32.5%, respectively. The total number of children reported born from IVF was 107,910, an increase of 28% from 1998. However, by evaluating the effect of incomplete reporting, it can be estimated that between 197,000 and 220,000 babies were born from IVF and related procedures in 2000.

CONCLUSION: Approximately 2/3 of the IVF cycles in the world are reported. Trends can be evaluated and some comparisons among regions and countries can be made. However, extreme caution must be exercised because of limitations of the study design, data collection and analysis.

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Wednesday, October 19, 2005
4:00 p.m.

O-260

Better Outcomes Using Microdose of Recombinant Human Chrorionic Gonadotropin (r-hCG Microdose) to Support Ovarian Folliculogenesis in Good Prognosis Patients. E. Borges Jr., L. M. Rossi, W. C. Busato, M. Bibancos, L. G. Maldonado, A. Iaconelli Jr.. Fertility - Assisted Fertilization Center, Sao Paulo, Brazil.

OBJECTIVE: The addition of urinary hCG microdose in late follicular maturation phase seems to be enough to maintain steroidogenesis and promote final oocyte maturation. In this study we have interested in comparison of metaphase-II retrieved/oocyte (MII/rate) and clinical data in protocols with or without administration of recombinant (r-hCG) microdose. We also have evaluated MII/rate obtained according to patient body mass index (BMI); time interval between hCG trigger and oocyte collection (ΔthCG to OPU) and diameter of dominant follicle (DF) at the oocyte pick-up (OPU) moment.

DESIGN: Prospective and randomized study

MATERIALS AND METHODS: Seventy-four patients underwent 78 ICSI-cycles were included. As inclusion criteria we have considered women with age $\leq$ 35 years-old, BMI$\leq$29 kg/m^2, basal-FSH $<$ 10 MIU/ml with regular menstrual cycles. Patients' synchronization was done by using oral-contraceptive-pill. Pituitary blockage was achieved with analogue of GnRH (agonist and antagonist). Patients have received 225 IU of Gonal-F (r-FSH) started on day-3 of menstrual cycle. When the leading follicle reached 14 mm, patients were randomized using a 1: 1 scheme to receive or not 7.7 μg of r-hCG diluted in 0.1 ml of a solution containing 250 μg of r-hCG, equivalent to 200 IU of LH activity per day (r-hCG microdose). Forty-one patients in whom r-hCG microdose was administered (43 cycles) were included in Group-A. On days 9/10, r-hCG microdose associated with 75 IU of r-FSH was administered. From day-11 r-hCG microdose was used alone until the r-hCG trigger (Ovidrel-SC-250 μg). Thirty-three patients (35 cycles) who have not received r-hCG microdose were included in Group-B. OPU was performed approximately 36h after r-hCG trigger in both groups. The embryos produced after ICSI were transferred on day+3. Data were analyzed and statistical analysis was performed using Mann-Whitney, T-Test and χ^2 as required, with $p<0.05$ considered statistically significant.

RESULTS: There were no statistical differences, respectively, groups A and B, in terms of mean maternal age (29.9$\pm$3.7 x 31.0$\pm$3.1; P=0.132); BMI (23.7$\pm$3.9 x 22.2$\pm$3.1; P=0.073) and ΔthCG to OPU (35.0$\pm$2.8 x 35.7$\pm$0.6; P=0.125). Lower units of r-FSH were needed in group-A (1,659$\pm$261) than Group-B (2,331$\pm$518; p=0.001) even though similar MII/rate in both groups (79.4% x 76.5%; respectively, Groups A and B, p=0.221). No differences were obtained in good-quality embryos percentage (41.6% x 44.4%; P=0.537) and mean number of transferred embryos (3.6$\pm$1.1 x 3.3$\pm$1.2; p=0.404). However, both pregnancy and implantation rates respectively, were statistically higher in group-A [19 of 41 (46.3%) and 18.1$\pm$23.6] than in group-B [6 of 33 (18.2%) and 8.6$\pm$20.5; P=0.021 and P=0.022, respectively, A and B]. BMI seemed not influence the MII/rate in group using r-hCG microdose [79.9% x 82.7%, respectively, normal BMI (range: 18.5-24.9) x abnormal BMI (range: 25.0-29.0), respectively, p=0.741]. No discrepant results were noted in terms of MII/rate when δthCG to OPU was $\leq$ 36 h or $>$ 36 h with or without rhCG. However, in group A, MII/rate was significant lower when DF$>$20 mm (65.9%) compared with DF between 18 - 20 mm (72.8%; p=0.001).

CONCLUSION: Higher implantation and pregnancy rates were gotten using fewer dose of rFSH added by microdoses of rhCG as a source of LH. Both BMI and δthCG to OPU seems not impair the MII/rate. However, when these protocols using r-hCG are employed, the OPU should not occur when follicles were higher than 20 mm.

Supported by: None