

DESIGN: Elective single blastocysts for transfer were initially offered to good prognosis patients based on transfer-day embryo quality without any additional incentive and limited education. A formal facility and physician incentive plan was then adopted in an effort to increase voluntary patient participation. Endpoints measured included patient acceptance rate, ongoing and multiple pregnancy outcomes as summarized in the table.

MATERIALS AND METHODS: Single blastocyst transfer was initially offered to patients ≤ 37 years of age and to patients using donor oocytes with at least two freeze quality blastocysts available at the time of transfer. After introduction of the formal incentive program, patients were asked to sign an agreement to elect or refuse a single blastocyst for transfer. Patients were educated on the risks and potential serious consequences associated with twin pregnancies, the availability of a SBT incentive and the need to make a decision on the day of blastocyst transfer. As part of the incentive, free cryopreservation and limited storage of blastocysts was offered when transferring a single blastocyst regardless of pregnancy outcome. Should the SBT not result in a live birth, the facility and physicians agreed to perform a subsequent frozen-thawed blastocyst transfer cycle at no additional cost.

RESULTS: The twin rate for patients with SBT was 2.7%. In contrast, the twin rate for patients declining a SBT was 78.8%. In addition, one triplet pregnancy occurred in the patient group declining SBT. All patients who elected a SBT had embryos cryopreserved. The cumulative fresh/frozen ongoing and term pregnancy rates for SBT was 74.6%. Similarly, the cumulative fresh/frozen ongoing and term pregnancy rates for patients who declined SBT and transferred two embryos was 79.9%.

Acceptance rate and clinical outcomes before and after incentive program

	No Incentive Program		With Incentive Program	
	Donor	Patient	Donor	Patient
	Oocytes	Oocytes	Oocytes	Oocytes
Patients Offered SBT:	56	96	31	80
Patients Accepting SBT:	15	32	20	47
Acceptance Rate:	26.8 ^a	33.3 ^A	64.5 ^b	58.8 ^B
Ongoing/Term Pregnancies (%):	11 (73.3)	19 (59.4)	13 (65.0)	32 (68.1)
Multiple Pregnancies (%):	0	1 (5.2)	0	1 (3.1)

A, B, a, b Numbers within rows with different superscripts are different. Fisher's Exact Test, $P < 0.01$

CONCLUSION: Even though SBT was offered to selected patients, the average number of embryos transferred to all donor recipients and day five transfers were reduced to less than two. Participation in SBT more than doubled for patients using donor oocytes and almost doubled for patients using their own oocytes after the incentive plan was formally introduced. Cumulative ongoing and term pregnancy rates were not affected when transferring single blastocysts within donor oocyte and patient groups. Finally, this study proves that when providing a significant incentive, two out of three patients will choose a SBT when properly educated without any coercion.

Supported by: NA

Tuesday, October 18, 2005
4:45 p.m.

O-210

ICMART World Report on In Vitro Fertilization 2000: How Does the United States Compare? 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, Hôpital de Bicêtre, Le Kremlin Bicêtre Cedex, Paris, France; IVF Unit, Sophiahemmet Hospital, Stockholm, Sweden; Unit of Reproductive Medicine, Clinicas las Condes, Santiago, Chile.

OBJECTIVE: To compare the results of IVF from different countries and regions of the world with those obtained in the United States for the year 2000.

DESIGN: Retrospective survey of regional, national and individual clinic registers of IVF results, including the SART/CDC registry.

MATERIALS AND METHODS: Data forms from the International Committee for Monitoring Assisted Reproductive Technology (ICMART) were sent in English with instructions to regional and national registries and selected individuals around the world. Returned surveys were analyzed using sums, percentages, means and regression analysis. The CDC returned the data for the US. 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. The United States (US) had 408 clinics. The mean centers' activity varied greatly, with many small centers with less than 100 cycles in United States (36%) compared to Europe (15%), whereas centers with more than 500 cycles for those regions respectively were 11% and 37%. The clinics worldwide reported 367,731 aspirations, including 191,109 for IVF, 175,147 for ICSI and 1,475 for GIFT. There were 52,875 frozen embryo transfers (FET), and 14,848 oocyte donor transfers. The US had 63,861 aspiration cycles, including 28,940 IVF, 34,430 ICSI and 491 GIFT. The US did not report FET, but had 6,941 oocyte donation transfer cycles. 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 worldwide, compared with 38.5% and 31.0%, respectively, in the US. For ICSI, world average PR and DR were 27.7% and 20.4%, respectively, compared with 35.2% and 28.6% in the US. On a world basis, 49.4% of the women were over age 34 and 14.4% over 39, compared with the US where the percentage was 54.9% and 18.0%. For ICSI the figures were 47.4% and 14.2% respectively, worldwide, and 51.2% and 15.3% in the US. The mean number of embryos transferred for IVF and ICSI were 2.5 and 2.7, respectively, compared to 3.0 and 3.1 in the US. The proportion of twin pregnancies was 26.9% for IVF and 26.2% for ICSI worldwide, compared to 31.7% and 30.5%, respectively, in the US. Triplet pregnancies were 2.8% for IVF and 2.9% for ICSI worldwide compared with 4.7% and 3.9%, respectively, in the US. 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. Oocyte donation had a higher PR and DR at 41.9% and 32.5%, respectively, worldwide, compared with 51.7% and 43.5% in the US.

CONCLUSION: Approximately 2/3 of the IVF cycles in the world are reported and compared to results in the US. The US has higher pregnancy rates and also higher multiple pregnancy rates, likely as a result of transferring more embryos than many countries. While extreme caution must be exercised because of limitations of the study design, data collection and analysis in comparing different regions of the world, such data are very useful in increasing our understanding of clinical utilization of IVF and its outcomes.

Supported by: ASRM, Bertarelli Foundation, European Society for Human Reproduction and Embryology, Fertility Society of Australia, Latin American Network of Assisted Reproduction (RED), SART.

Tuesday, October 18, 2005
5:15 p.m.

O-211

Reducing the Risk of Multi-Fetal Gestation by Implementation of a Single Blastocyst Transfer Policy. A. E. Sparks, G. L. Ryan, C. S. Sipe, A. J. Dokras, C. H. Syrop, B. J. Van Voorhis. University of Iowa, Iowa City, IA.

OBJECTIVE: Retrospective analysis of blastocyst transfer outcomes at our program revealed that patients transferring two good or excellent quality blastocysts had a high incidence of multi-fetal gestation (65% of all clinical pregnancies). To reduce the risk of multi-fetal gestation after blastocyst transfer, we implemented a single blastocyst transfer policy (SBT-P) on June 1, 2004. This study evaluates the effect of our SBT-P on blastocyst transfer outcomes.

DESIGN: An analysis of blastocyst transfer outcomes for one year before and 9 months after implementation of our SBT-P.

MATERIALS AND METHODS: All patients < 38 years old with ≥ 7 zygotes were scheduled for a day 5 transfer. After confirmation of fertilization, 7-8 zygotes were cultured and supernumerary zygotes cryopreserved. The day 5 embryo(s) that appeared to be most advanced in development and of highest quality at 114 to 120 h post-insemination were