Human Assisted Reproduction 2014 Live Birth Rates for Canada

Media Release
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Fertility Society lauds clinics for dramatic reduction in multiple pregnancies in 2013

Quebec City, QC – Canadian fertility clinics have decreased the number of multiple pregnancies arising from in vitro fertilization (IVF) from 32% in 2009 to 17.2% in 2013. These data, along with the birth outcomes, were presented in the Canadian Assisted Reproductive Technologies Registry (CARTR) Plus report at the 60th annual meeting of the Canadian Fertility and Andrology Society (CFAS) today.

“Our goal was to reduce the multiple pregnancy rate associated with IVF treatment in Canada to below 15% by 2015” says Dr. Albert Yuzpe, co-chair of the IVF Medical Directors of Canada. “Based on these results, we are well on our way”. Under the leadership of the IVF Medical Directors of Canada, all IVF clinics in the country voluntarily submit their IVF outcome data to CARTR Plus, part of the BORN (Better Outcomes Registry & Network) Ontario maternal-child registry. This CARTR Plus database, new in 2013, will provide more comprehensive data on fertility outcomes and the potential for long-term follow-up of the children born following in vitro fertilization.

“We are enormously proud of this significant drop in the number of multiples,” said Dr. François Bissonnette, Co-Chair, IVF Directors Group.

“The parallel piece of good news from this report is that we saw four times as many elective single embryo transfers compared to three years ago,” he said.

The data also revealed that clinical pregnancy and live birth rates are still being maintained. The complication rate remains low.

Figures:

Live birth rates were reported for a combined total of 16,062 IVF treatment cycles (including intracytoplasmic sperm injection [ICSI]) undertaken in 32 of 33 IVF centres in Canada in 2012.
There were 3615 IVF/ICSI treatment cycles performed in 8 centres in Western Canada, 5336 cycles in 15 centres in Ontario, 6761 cycles in 7 centres in Quebec, and 350 cycles in 2 centres in Atlantic Canada.
The overall live birth rate was 23% per cycle started, 25% per egg retrieval procedure, and 29% per embryo transfer procedure.
84% of births were singletons, 16% were twins, and 0.5% were triplets. This represents a decrease in multiple birth rate of 4 percentage points, compared with 2011, when 80% of births were singletons, 20% were twins, and 0.5% were triplets or more. Not all multiple pregnancies result in a multiple birth: in 2012, at about 6 weeks’ gestation, 17% of viable pregnancies were twins and 1.2% were triplets or more, compared with 16% twins and 0.5% triplets at birth.

The live birth rates per cycle started, by age of the mother, were:
- 31% for women under 35 years old
- 23% for women aged 35-39 years
- 10% for women 40 years old and over.

The proportion of babies with congenital anomalies was not different from that in the population of women conceiving naturally.

The miscarriage rate of 18% per clinical intrauterine pregnancy is in keeping with that for natural conceptions.

Preliminary results were reported for a combined total of 14,928 fresh IVF treatment cycles (excluding cycles using donor eggs) undertaken in 33 of 35 IVF centres in Canada in 2013:

The clinical pregnancy rate among all age groups was 28% per cycle started, 30% per egg retrieval procedure, and 38% per embryo transfer procedure.

83% of viable pregnancies were singletons, 17% were twins, and less than 1% were triplets. This represents a decrease in the multiple pregnancy rate of 1 percentage point compared with 2012.

A singleton pregnancy occurred following 21% of cycles started, 23% of cycles having egg retrieval, and 29% of cycles having embryo transfer.

The clinical pregnancy rates per cycle started, by age of the mother, were:
- 34% for women under 35 years old
- 28% for women aged 35-39 years
- 15% for women 40 years old and over.

The singleton pregnancy rates per cycle started, by age of the mother, were:
- 27% for women under 35 years old
- 20% for women aged 35-39 years
- 11% for women 40 years old and over.

The drive to reduce the number of multiple births through single embryo transfer began under Assisted Human Reproduction Canada (AHRC), the federal agency, closed in March 2013, which was set up to oversee assisted reproduction and fertility treatments in Canada.

“Accolades to AHRC for setting this process in motion,” said Dr. Yuzpe.

The IVF Medical Directors of Canada make these data available for reference and education and recommend they be reviewed together with an appropriate healthcare professional. Results vary by centre and specific information can be obtained from each centre. A list of the participating centres is available through CFAS.

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