Most IVF Patients Would Prefer Twins, Studies Say

This patient attitude goes against most physicians' concepts of treatment success.

BY KATE JOHNSON Montreal Bureau

PRAGUE — If given the choice between a singleton or twins, many patients undergoing in-vitro fertilization would prefer twins, according to several studies presented at the annual meeting of the European Society for Human Reproduction and Embryology.

At a time when many fertility clinics are actively trying to reduce their multiple birth rates by limiting the number of embryos they transfer after in-vitro fertilization (IVF), this patient attitude goes against most physicians' concepts of treatment success, said Dr. Graham Scotland, an investigator on one of the studies.

It has been assumed that much of the patient drive for transferring more than one IVF embryo has been linked to increasing their chances of becoming pregnant with a singleton.

But a Danish study has found that while this is true for some couples, almost 60% simply want twins. Dr. Hans Jakob Ingerslev surveyed 588 couples using a 56item questionnaire and found that 96% wanted two or more children in their family. Roughly 58% of the couples preferred twins, 38% preferred one child at a time, and the rest had no preference, said Dr. Ingerslev of the fertility clinic at Skejby Sygehus, a large university hospital in Aarhus (Denmark).

There were 60 couples in which the female partner wanted twins but the male wanted singletons—giving female gender an odds ratio of 1.65 for wanting twins.

Asked if they would accept a single embryo transfer (SET) if they were given an unlimited number of free cycles, 73% of couples said no. Moreover, offered free IVF treatment to conceive a second child later, 68% said no, Dr. Ingerslev said.

Among subjects who did not want twins, 24% cited risks to the fetus as their reason, while 18% cited maternal risks and 11% cited obstetric complications. Among those wanting twins, 23% cited wanting their child to have a sibling and 22% said they had a positive attitude about twins.

"Counseling these patients is a challenge," he said.

Another study uncovered the depth of some patients' reluctance to accept SET, although it is unclear whether their motivation was for twins specifically or simply to increase their chances of pregnancy. In a survey of 81 couples waiting for IVF treatment, Dr. Scotland asked patients to weigh the possibility of treatment failure against the types of complications they could face if they were to conceive twins.

In general, patients preferred the idea of having twin-related complications such as a child with physical or cognitive impairment over the prospect of treatment failure and childlessness, said Dr. Scotland, from the University of Aberdeen in Scotland. However, they ranked perinatal death as less desirable than treatment failure.

"This is an interesting and surprising finding. Perhaps we

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should listen more carefully to the values of our patients who want double-embryo transfer," said Dr. Scotland, noting that the absolute risks of conceiving twins are low, and the chances of twin-related complications are even lower.

"For some of these outcomes you're looking at something like 1% of twin pregnancies that will experience these adverse outcomes. Particularly difficult is that when you listen to a patient's values you have to weigh that against the fact that the risk is to another person—to the future offspring," he said in an interview.

Indeed it is important to remember that most twin pregnancies have no complications. added California fertility specialist Dr. David Adamson. "While it is absolutely true that the birth defect rate and the abnormality rate is higher in twin pregnancies compared to singleton pregnancies, we still have to remember that the vast majority of twin pregnancies end up with two healthy babies," he said in an interview. "That is not to say that we should be trying to get twins because we shouldn't-but we cannot make the argument that all [twin] pregnancies turn out as a bad outcome, that is absolutely not true.'

Educating patients about the risks of twin pregnancies can decrease some but not all interest in transferring more than one embryo, reported Dr. Ginny Ryan from the University of Iowa Hospitals in Iowa City. Previous work by her group has shown that IVF patients are three times more likely to desire twins, compared with a fertile population (30% vs. 10%).

In a new study, her group surveyed 120 patients waiting for IVF about their knowledge of fetal and maternal risks associated with twin pregnancies and then gave them an educational session about these risks. Although 30% of the group indicated a desire for twins prior to the educational session, this number dropped to 14% after the session. And whereas 78% of the group wanted a double-embryo transfer before the educational campaign, this dropped to 39% afterward, she said.

However, delving deeper into the issue, patients were asked about their acceptance of SET if it meant it could reduce their chances of becoming pregnant. With this prospect, 50% said they would opt for a double-embryo transfer.

Moreover, when asked whether SET would be acceptable to them if it gave them an equal chance at pregnancy compared with double-embryo transfer, 25% of the subjects said no.

Shortly after this study, Dr. Ryan's clinic implemented a mandatory SET program for women considered high risk for multiple pregnancy, so she could not evaluate whether the education campaign resulted in fewer women choosing double-embryo transfer.

However, she said the study highlights the fact that despite education, a substantial number of patients still want twins.

"While patient desires should be acknowledged, it is equally important to balance this against clinical judgment regarding the health of the patient, offspring, and society," Dr. Ryan said.

Malformation Rate After ICSI Largely Due to Inguinal Hernias

BY KATE JOHNSON Montreal Bureau

PRAGUE — Results of the longest follow-up study of children conceived through intracytoplasmic sperm injection are reassuring despite the finding that they have a significantly increased rate of two major malformations, reported Dr. Florence Belva, an investigator in the study.

"The absolute risk of major malformations should be interpreted with caution and may be due to our study design," Dr. Belva reported in a press conference at the annual meeting of the European Society of Human Reproduction and Embryology.

Her study compared 150 8-year-old children conceived through intracytoplasmic sperm injection (ICSI) with 147 spontaneously conceived control children. The only demographic difference between the two groups was maternal age, which was significantly greater in the ICSI children, compared with controls (32 years vs. 30 years), said Dr. Belva, a pediatrician and research assistant at the Center for Medical Genetics, Vrije University in Brussels. Parents were asked to complete detailed questionnaires about their children's medical histories, and the children underwent extensive physical examinations, which included a neurologic work-up.

The only difference found between the two groups was an increase in the rate of major malformations, defined as malformations causing functional impairment and/or requiring surgery. The rate was 10% in ICSI children and 3% in the control children, which translates into a relative risk of 2.9 for a major malformation in the ICSI group.

The differences in major malformations between the two groups were in the rate of naevus flammeus (two cases in the ICSI group, and none in the control group) and inguinal hernia requiring surgery (five cases in the ICSI group and one in the control group).

Dr. Belva said her finding of an increased rate of major malformations in ICSI children was consistent with those of other studies; however, she said, the 10% rate was higher than has been previously reported.

"This may be because we had stricter definitions of major malformation to make sure we did not miss anything. Also our follow-up of 8 years is the longest, because other studies only followed children to 5 years of age. We found additional malformations between 5 and 8 years, which would not have been included in the shorter studies," she said.

These findings are reassuring for parents, as long as they are carefully explained, said Dr. Sherman J. Silber of the Infertility Center of St. Louis. "I am concerned that the public may think that ICSI children have three times the rate of all major malformations, when it is simply an increase in inguinal hernias," he said.

Similarly, Dr. Joe Leigh Simpson noted the importance of putting the results in perspective. "In the United States our definition of major malformation is normally death, severe malfunction, or structural anomalies requiring surgery," said the professor and chair of obstetrics and gynecology at Baylor College of Medicine in Houston.

