Repaired Heart Defect May Mean Risky Pregnancy

The risk to the mother and infant is considerable in some cases after a childhood atrial switch operation.

BY MITCHEL L. ZOLER
Philadelphia Bureau

MUNICH — For women who were born with a congenital heart defect that was subsequently repaired, a healthy, event-free pregnancy is a roll of the dice.

"The risk to the mother and child is considerable in some cases, but not in all women" who become pregnant after having an atrial switch operation for transposition of the great arteries (TGA) as a child, Dr. Vessie Trigas said at the annual meeting of the European Society of Cardiology.

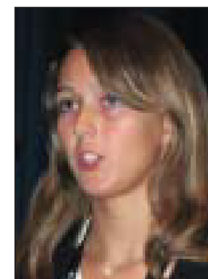
The risk is "unpredictable," and therefore, these women need careful follow-up throughout pregnancy, ideally at a center that specializes in managing adults with congenital heart diseases, said Dr. Trigas, a congenital heart disease researcher at the German Heart Center in Munich.

Women who have undergone a TGA procedure "need to be informed that they can worsen" when pregnant, she added.

TGA is one of the most common congenital heart defects, accounting for about 5%-8% of congenital heart cases. If untreated, most children with TGA die before they are 2 years old, but with an atrial switch operation, most patients survive into at least their 30s.

To examine the effect and outcome of pregnancy in women with repaired TGA, Dr. Trigas and her associates reviewed the records of 60 pregnancies in 34 women who were followed at any one of three centers in Munich, Berlin, and Zurich. A total of 20 women had a history of isolated TGA as infants, and 14 had complex TGA that included other complications. Their average age at TGA repair was 19 months, with the latest done at 14 years. Their average age at first pregnancy was 25 years, ranging from 16 to 34 years. Their average age at the last pregnancy was 27 years; the oldest woman was 35 years old. The average duration of follow-up was almost 5 years.

Prior to pregnancy, 28 women were in functional class I, 5 were in class II, and 1 woman did not have her functional class documented in her records. Pregnancy led to class deterioration in seven women, but none of the women died during pregnancy.



Serious cardiac events during pregnancy included two cases of decompensation, and two other decompensation episodes that required resuscitation during delivery. Right ventricular dysfunction progressed in five patients. Tricuspid valve regurgitation progressed in three patients. Subpulmonary valve obstruction progressed in one woman and a new obstruction appeared in another. Systemic venous obstruction progressed in one woman, and three women developed new baffle leaks.

Obstetric complications occurred during 26 pregnancies, and included premature contractions in 9, vaginal bleeding in 5, dyspnea in 5, and premature rupture of membranes in 4.

Forty-four of the pregnancies resulted in term deliveries, and there were 16 abortions; 11 were miscarriages and 5 were induced. Births occurred at 29-42 weeks of gestation, with a median of 39 weeks. Sixteen deliveries were normal vaginal deliveries, 4 involved the use of forceps or suction assistance, and 24 were by cesarean section. Eleven deliveries were premature, at less than 37 weeks' gestation. The average birth weight was 2,910 g, with a range of 910-4,160 g. Three infants were born at less than 1,500 g. None of the infants had a congenital heart defect at birth.

These women need careful follow-up throughout pregnancy, ideally at a specialized center.

DR. TRIGAS

Delivery emergencies included a need for resuscitation because of cardiac arrest in two women, and one case of cardiac and renal failure at 8 weeks post partum. ■

Maternal AB Blood Type May Multiply Risk of Preeclampsia

BY HEIDI SPLETE
Senior Writer

WASHINGTON — Blood type AB appears to be a risk factor for preeclampsia, based on the findings of a population-based study of 100,000 consecutive pregnancies in Finland.

Maternal blood type, routinely recorded in pregnancy, may be another way of identifying women at risk for preterm preeclampsia, especially those with other risk factors such as a high body mass index, first pregnancy, or twin pregnancy, said Dr. Hannele Laivuori of the department of medical genetics at the University of Helsinki and colleagues. The results were presented as a poster at the annual congress of the International Society for the Study of Hypertension in Pregnancy.

To examine whether ABO blood type and factor V Leiden clotting factor are associated with preeclampsia risk, the researchers reviewed data from a national registry of blood types of pregnant women and a national registry of medical records.

The nested study population included 248 women who met criteria for preeclampsia and 679 women without preeclampsia who were control subjects. The women gave blood samples and completed questionnaires to supplement the information from their medical records.

Overall, women with the AB blood type were more than twice as likely to develop preeclampsia (odds ratio, 2.1) and nearly four times as likely to develop preterm preeclampsia (OR, 3.8) as were women with blood types A, B, or O. Preterm preeclampsia was defined as preeclampsia at less than 34 weeks' gestation. When only a first pregnancy was analyzed, the association between blood type AB and preeclampsia was significant only for preterm preeclampsia.

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"Factor V Leiden was not a risk factor for preeclampsia in this study population," the researchers noted.

Age, education level, and place of residence (rural vs. urban) were similar for those with and without preeclampsia. After investigators controlled for confounding factors, a high body mass index before pregnancy, first pregnancy, and twin pregnancy were significantly associated with an increased risk of preeclampsia.

The findings support those of the few previous studies on this topic, including an Italian study that found women with blood type AB were three times as likely to develop preeclampsia as were women with other blood types (J. Hum. Hypertens. 1995;9:623-5).

The study was supported in part by the Red Cross Finland Blood Service.

Dr. Laivuori stated that she had no relevant financial conflicts to disclose. ■

Perinatal Depression Patients Want Flexibility in Therapy

BY SHERRY BOSCHERT
San Francisco Bureau

PHOENIX — Flexibility in scheduling would help depressed women access cognitive-behavioral therapy during or just after pregnancy, a survey of 24 women found. A little more respect would be nice too, respondents said.

Results of the qualitative survey informed a revision of a cognitive-behavioral treatment manual that will be tested in a randomized, controlled trial with 60 women comparing the revised therapy model with treatment as usual, Heather A. Flynn, Ph.D., said at a meeting of the New Clinical Drug Evaluation Unit sponsored by the National Institute of Mental Health.

She and her associates used the Edinburgh Postnatal Depression Scale to screen 274 pregnant or postpartum women in the waiting rooms of five obstetrics clinics. The Structured Clinical Interview for DSM Disorders identified 24 of these women, who completed a questionnaire about their preferences for receiving cognitive-behavioral therapy, with major depressive disorder or minor depression. The women said they would prefer to get CBT in an obstetrician's office or at home by telephone. Postpartum women said that having child care available at the clinic would be a big help. "We're actually doing that now," said Dr. Flynn, an assistant professor of psychiatry at the University of Michigan, Ann Arbor.

All 24 women spontaneously reported that they have felt judged, disrespected, or stigmatized by health care workers. "Women did not feel that they were listened to" as they tried to get help, she said.

The women did not acknowledge that what they were experiencing was depression, however, and did not want therapy to be presented as treatment for depression. "The way you present treatment is very important," Dr. Flynn suggested.

The investigators preliminarily tested an eight-session program of CBT in 12 patients, all of whom showed up for the first three sessions that were conducted with prenatal care visits at the obstetrics clinic. Overall, half of all sessions needed to be rescheduled in order for 78% of the sessions to be completed, she reported. One woman stopped therapy; three completed the eight sessions; and eight patients are still in therapy.

The 11 patients who completed or who continue therapy have benefited from treatment, Dr. Flynn said, and they report high satisfaction with the program. "The more flexible we are, the more likely that we're going to retain these women in therapy," she said.

Several previous studies found that approximately 75% of women with depression during pregnancy or the postpartum period go undiagnosed or untreated, Dr. Flynn said. One of the main barriers seems to be difficulty in accessing treatment. "The treatments are probably fine. It's just that women are not accessing them," she said. "They may or may not be ambivalent about treatment. It's just that they have chaotic lives."

Most of the women in her pilot studies had incomes below the poverty line, and a few were homeless. Many lacked transportation. "We need to be as flexible as possible to accommodate these women," she said. ■