Pregnancy in Complex Congenital Heart Disease

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Pregnancy is one the most important issues pertaining to patients (pts) with complex congenital heart disease. We reviewed our database for patients (pts) with complete and congenitally corrected transposition of the great arteries (TGA and CTGA), Fontan physiology, Eisenmenger syndrome and unrepaired cyanotic heart disease, who sustained a pregnancy.

There were 36 women with 56 pregnancies: CTGA – 11 pts 24 preg, TGA - 10 pts (post atrial switch – 8 pts, post arterial switch – 2 pts) 13 preg, Fontan - 5 pts 6 preg, unoperated Fallot – 2 pts 3 preg, Eisenmenger – 8 pts 12 preg.

Five CTGA pts had additional anomalies or previous operations. TGA post atrial switch pts included two with bio-prosthetic tricuspid valve. All but one pregnancies in this group were uneventful. There was no deterioration of myocardial function or worsening tricuspid regurgitation.

Two Fontan pts received medication for early heart failure. One pt had termination of pregnancy due to fetal hypoplastic left heart. One pt had severe post partum bleeding, accelerated protein losing enteropathy and is now on chronic hemodialysis.

The two pts with unoperated TOF had three uneventful pregnancies and deliveries.

Two pts with ASD and Eisenmenger syndrome had 5 children before the diagnosis was made. 2 pts died in the immediate post partum period after successful delivery of their first baby. One pt with 2 children died at age 22 years.

Pregnancy can be successful and safe in pts with systemic right ventricle and unoperated cyanotic anomalies. Pregnancy in Eisenmenger syndrome remains dangerous and contraindicated. Pts with Fontan physiology may have serious complications.