

Mode of Delivery and Pregnancy Outcome in a Tertiary Center for Adult Congenital Heart Disease

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Background:

As a result of the continuing improvement of congenital heart disease (CHD) therapy, a growing number of women are reaching child bearing age. Contemporary maternal risks of pregnancy and preferred modes of delivery are not well known.

Aim:

To review all deliveries of CHD patients in our center since 2000, regarding mode of delivery and maternal outcome.

Methods and Results:

There were 391 deliveries. Mean age at delivery 30.3 (± 5.5) years, age range 17.4-48.5 years. 208 women had 1 delivery (4 twins), 58 had two, 17 had three and 4 had four. 231 (59%) deliveries were spontaneous, 94 (24%) by cesarean section (CS) and 66 (17%) after medical induction of labor. 120/231 (52%) spontaneous deliveries were entirely uneventful. The rest had premature rupture of membranes (26), fetal distress (23), bleeding requiring transfusion (10), maternal arrhythmia (3), vacuum delivery (30), forceps (6) and perineal laceration grade II or more and/or uterine exploration. 56/66 successful medical inductions of labor were for cardiac indications. 18 had shunt lesions, 17 valve disease, 10 TGA complex, 7 TOF, 2 Fontans and 2 PFO post stroke. 58/94 (62%) CS were elective (both term and preterm). 7 were for very high risk CHD – 4 Eisenmenger Syndrome, 2 PHT, 1 TGA –Rastelli, 1 Fontan. 33 CS were urgent. 2/4 Eisenmenger patients died. Two more patients died, both with repaired DSS: one crashed after induction of labour and one died at home 3 days after an uneventful delivery. There were 7 more serious complications but with good outcome.

Conclusions:

This large single center series of deliveries in CHD, shows that except for Eisenmenger patients, maternal outcome is very satisfactory with a very low cardiac complications rate in all modes of delivery. A higher than expected rate of CS suggests that the threshold for this intervention was lower in CHD patients.