

Perinatal care after fetal diagnosis of congenital heart defect - single centre experience

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Introduction:

Specialized delivery room planning and early stabilization for neonates with congenital heart disease (CHD) seems to be very important to provide a good quality care. Prenatal diagnosis of CHD changed the need for urgent transportation of those babies due to sudden deterioration of their condition. The objective of this study was to determine the impact of fetal echocardiography on way of delivery, immediate postnatal treatment and need of transport to a reference cardiac center from a tertiary neonatal center throughout 15 years of single center experience.

Methods:

Out of 1095 patients with CHD born in our hospital from 2002 to 2016 we excluded cases of mild defects such as ventricular septal defects, aberrant right subclavian artery, right or double aortic arch. 652 patients with severe and critical CHD were included in this retrospective study. The history of perinatal care (way of delivery and indications, pre- and postnatal diagnosis, time of the transport to the cardiac center) were evaluated.

Results:

Cesarean section was performed in 241 (37%) CHD patients. Common causes of instrumental delivery were obstetric indications, risk of asphyxia, mothers' diseases. CHD was the cause only in 4 (2,45%). Before 2009, the median time from birth to transport to a reference cardiology unit was 4,3 days. From 2009 to 2016 it raised to 6,2 days. From 2009 – 2012 only 9 (4,27%) of babies were discharged directly to home, whereas from 2013 till 2016 -60 (17,39%). Mortality rate in the neonatology unit was 2,45% (16).

Conclusions:

Fetal echocardiography enabled much better planning of perinatal care of newborns with CHD in reference centers. Our study revealed that children with CHD don't need to be born by c-section, especially when we do know advantages of a natural labour over c-section and importance of skin to skin contact. Such policy had great benefits for babies and mothers. Neonates got more kangaroo mother care, better stabilization after birth till the time of transportation, better respiratory and cardiovascular adaptation. It also enabled stress reduction and better lactation support for mothers. Such organization most probably strengthens mother-child bond from the very first moments and enhanced neurological outcome of children.