Delivery mode in women with congenital fetal heart disease (CHD)

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Objective. The aim of this study is to evaluate the impact of delivery mode on neonatal birth outcomes in women with fetal CHD.

Materials and Methods. We retrospectively reviewed the data charts of patients who delivered in our Hospital between 1st January 2019 to June 2022 with antenatal diagnosis of CHD. Data were collected from obstetrical ward databases and delivery room records. We analyzed maternal characteristics, CHD type, delivery mode as well as fetal outcomes in terms of mean weight, mean pH, Apgar scores and intubated fetuses at birth.

Results. 98 women were included with prenatal diagnosis of TGA (10/98 10.2%), TOF (8/98 8.1%), CoA (9/98 9.1%) pulmonary and aortic valve stenosis (6/98 6.1%), right or left heart hypoplasia (9/98 9.1%), other CHDs of lower frequency (56/98 57.1%). Vaginal deliveries accounted for 67 (68.3%) of the total. Spontaneous labor with normal vaginal delivery was 41.8% (28/98). In 39 (58.2%) women labor was induced with only 3 cases of operative vaginal delivery (7%). The rate of cesarean deliveries was 31 (31.6%): 15 (48.4%) urgent and 16 (51.6%) elective. Of 98 neonates 5 (5.10%) were intubated at birth, 2 born by vaginal delivery, 2 by urgent cesarean, and 1 by elective cesarean. Neonatal mortality rate was 3.06%: 1 TGA, 1 CHD associated with malformative syndrome and 1 left heart hypoplasia.

Conclusions. Safe vaginal delivery can also be obtained in women with prenatal diagnosis of severe CHD with no effect on neonatal outcomes.