



Outcomes of neonates with prenatally diagnosed congenital heart disease

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Objective

To demonstrate short-term outcomes of newborns who underwent delivery at a tertiary care hospital in Turkey.

Methods

Newborns with prenatally diagnosed congenital heart diseases who underwent delivery at Gaziantep University Hospital during the period 2015-2016 were included in this study. Neonatal outcomes were obtained from the hospital records.

Results

Of the 70 newborns who had CHDs, 15 (21,4%) had prenatal diagnosis. The median gestational week was 37,4 weeks; the median birth weight was 2930 g. Five newborns were late preterms, and the remaining were born at term. Three newborns (20%) were delivered vaginally. Seven of the 15 were male (46,7%). Three patients had genetic syndromes (two had trisomy 21 and the other del 7q11.23 - Williams Beuren Syndrome). Two patients had extracardiac anomalies. Postnatal echocardiography was concordant with only minor variations not affecting outcomes with the fetal diagnosis. There was no major discordance between fetal-postnatal diagnosis. Diagnosis of patients and clinical outcomes were summarized in a table. Three patients required emergency cardiac surgery, eight patients underwent catheter-based interventions, and four patients needed only close clinical follow-up.

Conclusion

Prenatal diagnosis of CHD allows delivery at a tertiary cardiac centre, rapid postnatal diagnosis and emergent optimal management so that neonatal outcomes can be better, especially in developing countries.

Table. The clinical outcomes of neonates with prenatally diagnosed congenital heart disease.

Patient	Diagnosis	Process	Survive
1	Pulmonary atresia, Tricuspid atresia	BT shunt surgery	exitus
2	Pulmonary atresia, Tricuspid atresia	BT shunt surgery	exitus
3	Pulmonary atresia, Ebstein anomaly	PDA stenting, Pulmonary balloon valvuloplasty	exitus
4	Pulmonary atresia	BT shunt surgery	discharge
5	Critical pulmonary stenosis	PDA stenting	discharge
6	Pulmonary atresia	Pulmonary balloon valvuloplasty, atrial septostomy	discharge
7	Critical pulmonary stenosis	Pulmonary balloon valvuloplasty	discharge
8	Critical pulmonary stenosis	Pulmonary balloon valvuloplasty	discharge
9	Critical pulmonary stenosis	Pulmonary balloon valvuloplasty	exitus
10	Hypoplastic left heart syndrome	Atrial septostomy (failed)	exitus
11	Atrioventricular canal defect	clinical follow-up	discharge
12	Coarctation of aorta	Aortic balloon valvuloplasty	discharge
13	Pulmonary stenosis	Clinical follow-up	discharge
14	Ebstein anomaly	Discharge	discharge
15	Pulmonary atresia	PDA stenting	discharge