

Evaluation of heart murmur etiology in neonates at neonatology ward in Imam Khomaini and Alavi Hospitals from mehr 1385 until mehr 1386.

Abstract

Introduction : Congenital heart disease is the most common form of cardiovascular disease in children . In attention to importance of this anomaly and no previous data about prevalence of CHD in this area, the study was performed in Ardebil in the period from mehr 1385 until mehr 1386. The aim of this study was to present the reasons of heart murmurs found in new borns based on postnatal echocardiography and to investigate the correlation between heart murmur and different factors associated with CHD:

Methods and materials: A sectional descriptive-analytic study on 91 newborns admitted in the Imam Khomeini and Alavi Hospitals in the neonatology ward in the period from mehr 1385 until mehr 1386, found to have heart murmur during the clinical examination. The data and echocardiography results were extracted from files.

Results: Echocardiography results was normal in 28 newborns (30.8%) , and the others had CHD,the most frequently abnormality was VSD that was found in 15 cases(16.5%). TR was found in 13 patients(14.3%).Other findings were:PDA(5.5%) , PS(5.5%), LVH(3.3%) , PDA and TR together(3.3%) , TGA (2.2%) , ASD(2.2%).

38 of cases who had CHD (41.8%) were female and 25(27.5%) were male .There was no history of CHD in sibling in the newborns.Using of folic Acid during prenatal period or first trimester of pregnancy by mothers was seen in 42 of cases (72.4%)who had CHD.7 newborns below 1500gr(53.8%) and 26 of cases (65%) with normal birth weight (2500-4000gr)had CHD. 59.3% of patents were first child. In half of cases heart murmur was detected at first day of life or the first week of life.There is a negative correlation between age of mother and CHD (sig=0.044<0.05) and there's no significant correlation between CHD and other factors.

Conclusions: Innocent murmur was found in about one-third of newborns, and the others had CHD. The most frequently abnormality was VSD Echocardiogram is suitable for diagnosis of the abnormalities. The rate of CHD is higher in newborns that their mothers were older (sig=0.044).

Key words: newborn, heart murmur, congenital heart disease, echocardiography