Frequency of associated congenital heart defects in Down syndrome.

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Patients with Down syndrome are prone to have congenital heart defects. Study was done to find the frequency of congenital heart defects in children with Down’s syndrome in Children Hospital Lahore.

Material & Methods:
The descriptive study had directed by the Department of Cardiology in The Children’s Hospital and the Institute of Child Health, Lahore, in year 2015. Fifty-eight phenotypically Down syndrome children coming to the cardiology department for echocardiography from birth to 13 years were included in this study. The 2–dimension echocardiography had been done after detailed history and physical examination.

Results:
Congenital heart defects were found in 29 out of 58 patients (50%). Among the affected patients, 16 (55.2%) were males and 13 (44.8%) females with ratio of 1.2:1. Acyanotic lesions were common (79.31%) than cyanotic lesion (20.69%). Among the isolated lesions ventricular septal defect, patent ductus arteriosus and complete atrioventricular defects were the commonest defects (20.69%) each, followed by pulmonary atresia (6.89%), tetralogies of Fallot, transposition of great arteries and double outlet right ventricle (3.45%) each. Among the mixed lesions ventricular septal defect with atrial septal defect was most common (6.89%), followed by Coarctation of aorta patent ductus arteriosus, univentricle with atrial septal defect, and double outlet right ventricle and pulmonary atresia (3.45%) each.

Conclusion:
Heart defects are found in 50% children with Down syndrome. The commonest in acyanotic lesion are ventricular septal defect, in cyanotic cardiac lesion pulmonary atresia and in case of mix lesion ventricular septal defect with atrial septal defect were found.

Key Words: Down syndrome, Congenital heart disease, Transposition of great arteries, Pulmonary atresia, Tetralogy of Fallot’s, Ventricular septal defect.