Congenital heart disease in Tunisia: what can we learn from an echocardiographic study in a developing country?

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All patients with congenital heart disease (CHD) diagnosed in the cardiology department at Hedi Chaker Hospital (Sfax) from July 2009 to June 2012 were included in the study based on echocardiography findings. Patients were followed up to September 2012.

Results: 674 patients, 330 (49%) males with congenital heart disease were studied. All patients were evaluated with echocardiography. Left-to-right shunts were the commonest defect in 342 patients (50.7%), caused by ventricular septal defect in 154 patients (22.8%), atrio-ventricular septal defect in 45 patients (6.6%), atrial septal defect in 75 patients (11.1%) and persistence of ductus arteriosus in 67 patients (10%).

Tetralogy of Fallot was the most common cyanotic defect, present in 29 patients (4.3%). Transposition of great arteries was the second cyanotic defect with 19 cases.

Coarctation of the aorta were diagnosed in 27 cases, fourteen of which died. 428 (63%) children presented for echocardiography before the age of one year, and 532 (79%) presented before the age of five years.

121 children died during the study, a case fatality of 17.9% if we consider all cases of CHD but it reaches 37% if we consider only severe CHD.

Conclusions: The situation of pediatric cardiology is still worrying in Tunisia. This study has revealed a high case fatality rate among children suffering from CHD. Much remains to be done to guarantee that every child born in Tunisia with cardiac anomalies can have access to appropriate medical and surgical care.