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EDITORIAL COMMENTARY

Congenital Heart Disease: Where Are We and the Way Ahead!

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With a birth prevalence of 8/1000, about 2,00,000 children are born every year with congenital heart disease (CHD) in India [1]. Out of these, nearly 50,000 children would require intervention during infancy. Prevalence of CHD does not differ much in developed and developing countries. In developed countries, most children with CHD are diagnosed early and undergo timely intervention. The Center for Disease Control and Prevention (CDC), USA reports 18-y survival rates of 95% and 69% in babies born with noncritical CHD and critical CHD, respectively [2].

In contrast, developing countries report far higher mortality rates [3]. Paucity of health care facilities and financial constraints often lead to delay in seeking health care and/or getting appropriate and timely interventions [3]. This results in a large cohort of children with undiagnosed/untreated CHD. Since these children are prone to develop respiratory tract infections, congestive heart failure, and cyanotic spells, they need frequent hospital admissions.

In this issue, Banothu et al. have described their experience of managing 58 children with unoperated CHD in pediatric intensive care unit (PICU) [4]. Acyanotic heart disease was seen in 62% patients; ventricular septal defect being responsible for 25% of the cohort. Most admissions were for pneumonia and congestive heart failure. Wasting and stunting was seen in 84% and 48% patients, respectively. Nearly half of the children were in shock at admission. Mechanical ventilation and vasoactive support were required in 95% and 90% children, respectively. Overall, a mortality rate of 50% was seen in the cohort. Out of 24 children, who underwent surgery, 9 died. Twenty children died in the subgroup where no surgery could be performed. Type of CHD, nutritional status, and surgical intervention were not associated with difference in mortality.

A large proportion of children in the cohort were malnourished, even though the authors did not document any difference in mortality in these children. Malnutrition has been found to be associated with higher mortality after surgery in CHD even in developed nations [5]. It has been seen that most children with CHD have normal weight at birth in developed countries but start falling off their trajectory in initial few months due to disproportionate needs. Marino et al. have shown that an appropriate nutrition plan helps to reduce the prevalence of malnutrition in children waiting for surgery [6].

Early diagnosis and treatment are necessary for a good outcome. A strong programme for early detection of CHD and appropriate referral is required at the community level. Further, pediatric cardiology and cardiac surgery centers should be established and strengthened at state level. Focus on treatable CHD and financial support would help in improving outcomes in CHD.

Declarations

Conflict of Interest None.

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