



Pediatric Cardiology: Updates for Pediatrician

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Received: 26 February 2020 / Accepted: 26 February 2020 / Published online: 13 March 2020
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With an incidence of nearly 1% in live births, congenital heart diseases (CHDs) are important causes of morbidity and mortality in children. Roughly 2,40,000 newborns are born with CHD in India every year. A large proportion of these would need surgical or percutaneous correction for a favorable outcome. This is a tremendous load for available pediatric cardiology services, which are concentrated in a few centers all over India. Pediatricians and nursing staff need to be sensitized towards early recognition of CHD and timely referral. This symposium on Pediatric Cardiology by Indian Journal of Pediatrics is an attempt in this direction. We are delighted to receive the privilege of being editors of this symposium and grateful to team Indian Journal of Pediatrics.

This symposium is published in two parts. In the first part, Arvind B and Saxena A have discussed the timing and choice of intervention in various CHDs based on a delicate balance between natural history of CHD and risks and outcome of available interventions [1]. These guidelines will help pediatrician in managing and advising appropriate therapy to children with congenital heart disease. Diagnosis of arrhythmia remains a challenge to the pediatrician in emergency. Rohit M and Kasinadhuni G have discussed various tachyarrhythmias encountered in Pediatric emergency [2]. Besides CHD, certain acquired diseases like rheumatic fever have the potential to affect heart with serious morbidity. Though incidence of rheumatic fever seems to be reducing all over India, pediatricians must not forget this important illness. Arvind B and Ramakrishnan S have discussed the pros and cons of 2015 updates of Jones criteria, especially the additional benefit of 12–21% in the diagnosis of rheumatic fever by using echocardiography [3]. Congestive heart failure (CHF) is an important

symptom complex of many congenital and acquired heart diseases. Hence it is important for clinicians to know how to recognize CHF, find its etiology by using simple clinical examination and basic investigations and be able to manage a child with CHF. Rohit M and Budakoty S have discussed this topic and highlighted that, before labeling idiopathic cardiomyopathy certain diseases which are curable, should be excluded [4].

In part 2 of this symposium, the first article is on the diagnosis of critical heart diseases by Krishna MR and Kumar RK [5]. They have stressed on the identification of critical CHD by clinical examination and use of pulse oximetry by nurses and/or pediatricians in community setting. They have also discussed importance of prenatal diagnosis to improve outcome of critical CHD. There is an urgent need to study feasibility and benefits of adopting such a model all over India. Rohit M and Rajan P have described how to recognize various cyanotic congenital heart diseases [6]. It is important to recognize transposition physiology in cyanotic congenital heart disease, as early diagnosis of this condition with early surgical treatment is essential for survival of the baby. Kannan BRJ has nicely described clinical approach to acyanotic congenital heart diseases [7]. He has also described natural history of CHD, highlighted the important clinical features of CHD and has stressed on diligent clinical examination and use of basic investigations like chest radiographs and electrocardiography to arrive at a diagnosis. Echocardiography remains the main diagnostic modality to confirm various congenital heart diseases. There has been tremendous advance in imaging modalities for diagnosis of congenital heart diseases and in comparison to the past, CT and MRI have replaced cardiac catheterization. Sachdeva S and Gupta SK have described role of various imaging modalities in detail [8].

We hope that the readers, while dealing with cardiac problems in children, would find this symposium useful in day to day clinical practice. We are grateful to the editorial team of Indian Journal of Pediatrics for giving us this opportunity.

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Compliance with Ethical Standards

Conflict of Interest None.

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