

Functional echocardiology in high risk neonatal intensive care unit

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India accounts for 30 per cent of the neonatal deaths globally. In India, the neonatal mortality rate is 37/1,000 live births. Most of these deaths occur within the first days of life: 46.2 per cent occurring in the first two days of life and 73.3 per cent taking place within the first week of life. Around 10% of neonatal mortality can be attributed by CHD amongst otherwise healthy term neonates.

The neonatal care is becoming more amenable in remote India with the introduction of training programs by WHO UNICEF coordinated with the national forum like NNF and IAP. Now the institutional delivery rate is increasing. The big achievement is installation of special care neonatal units (SCNU) all over India with the help of these agencies and government. However, the lower gestational age and birth weight is associated with increased risk of hemodynamic challenges which calls for urgent diagnosis and intervention. Age old clinical methods are still relevant but they have limitations. With current technology dependent medical practice has taken away the auscultatory skills. More-over many life-threatening CHDs have rare presence of murmurs and are missed till the baby becomes very sick.

Recently published literature has shown that use of echocardiography changes decision for a favorable outcome. The evaluation in intensive care units needs many decisions for medical management like fluid administration, inotropes and medical therapy of PDA.

This has induced the thought process to include targeted echocardiography in routine practice. This discussion concludes the need for postgraduate training and a definite need for basic training of neonatologists to improve the outcome of sick neonates by recognizing and timely referral to the tertiary care centers.

Biography

Smita Mishra has done MD in pediatrics in 1991 from SS medical college Rewa MP. She has worked in Ram Manohar Lohia hospital New Delhi and later started her own practice. She started career in pediatric cardiology at Escorts heart institute after completing FDNB. She was convener of IAP consensus meeting on pediatric ARF/RHD. She was faculty in consensus meeting on timing of intervention in CHD, drug treatment in pediatric cardiology. She is secretary of cardiology chapter of IAP and editor in chief of www.cardiopap.org. She has conducted echo workshop recently as preconference workshop PEDICON 2012 for pediatricians and neonatologists in intensive care. She has written chapters in book and co-author of IAP drug formulary. She has started Spandan program for screening and treatment of underprivileged children with cardiac defect in remote city of Rewa. This later was adopted by state government of MP.

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