

echocardiography would have had additional confirmatory value.

The use of high PEEP has been well documented to worsen hypoxemia in neonates, especially in an infant with alveolar overdistension associated with MAS. Alveolar overdistension possibly increases the pulmonary vascular resistance and secondarily increases the intra-pulmonary shunt fraction(3). This would have compounded the baby's problems.

Babies with PPHN are difficult to manage, with a mortality rate around 50%. Too rapid a decrease in the ventilator settings, can be disastrous, because of the "hypoxic flip-flop". Ventilation has to be adjusted to maintain a "critical level of PaCO₂" at which the PaO₂ tends to rise. The critical level of PaCO₂, though usually under 30 mm Hg, varies with individual babies.

In our neonatal unit, we have successfully managed cases of PPHN with hyperventilation in high oxygen concentrations, meticulous nursing care, minimum handling, use of alkali and occasional use of the pulmonary vasodilator, tolazoline and use of cardiostimulant agents like dopamine.

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REFERENCES

1. Singhal PK, Bagga A, Arora NK, Deorari AK, Paul VK, Singh M. Persistent pulmonary hypertension in the newborn. *Indian Pediatr* 1990, 27: 763-764.
2. Duara S, Gewitz MH, Fox WW. Use of mechanical ventilation for clinical management of persistent pulmonary hypertension in the neonate. *Clin Perinatol* 1984, 11: 641-652.

3. Nelson RM, Egan EA, Eitzman DV. Increased hypoxemia in neonates secondary to the use of continuous positive airway pressure. *J Pediatr* 1971, 91: 87.

Reply

We thank Dr. Bhandari and colleagues for valuable comments on our case report. Several points raised by them on the diagnosis and management of neonates with persistent pulmonary hypertension and extensively covered in our review article that appeared subsequently(1).

The comments on the role of PEEP in increasing pulmonary vascular resistance are valid. Lack of reference to FiO₂ (which was 1.0) alongwith the IPPV settings given in the report was an inadvertent typographical error.

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REFERENCE

1. Paul VK, Singhal PK, Bagga A, Deorari AK, Singh M. Persistent pulmonary hypertension in the neonate. *Indian Pediatr* 1990, 27: 841-847.

Poliomyelitis and Immunization Status

In the article entitled 'Poliomyelitis with special reference to Immunization status' by Mathur *et al.*(1) the observation of high mortality among partially vaccinated children and its interpretation as an