
Letters to the Editor

Cerebral Palsy

The recent article by Srivastava *et al.* highlights the multifaceted problems relating to cerebral palsy(1). While their recommendations regarding the need to reinforce the existing maternal and child health services are indeed justifiable, the authors' observation that natal factors were responsible for majority of the cases of cerebral palsy (43.8%) are at variance with other recently published reports(2-4). Perinatal factors of labor and delivery, *e.g.*, midforceps delivery, prolonged labor, breech delivery, nuchal cord, *etc.* were previously implicated but now have been proven beyond doubt not to correlate well with cerebral palsy, mental retardation or seizure(3,4). This view is further supported by observation of static incidence of neurological sequelae despite improvement in perinatal care. With regard to perinatal anoxia, it is noteworthy that the degree of asphyxia necessary to cause permanent brain damage in experimental animals is quite close to which causes death and it is true for humans too(5). Therefore, as in the animal models, death, on one hand, or intact survival, on the other are most likely outcomes than survival with brain damage. Conversely, even when perinatal asphyxia is confirmed, most etiologies of such asphyxia are due not to

preventable intrapartum events or interventions but to pre-existing, usually congenital, often subtle (cytoarchitectural) malformations and dysgenesis, neurologic or otherwise(3,4); which is rather responsible for the mental retardation or cerebral palsy detected later on follow up. Natal factors mentioned by the authors(1), thus, were mere associations and not responsible for cerebral palsy and associated handicaps in their patients.

REFERENCES

1. Srivastava VK, Laisram N, Srivastava RK. Cerebral palsy. *Indian Pediatr* 1992, 29: 893-996.
2. Nelson KB, Ellenberg JH. Antecedent of cerebral palsy, univariate analysis of risks. *Am J Dis Child* 1985, 139: 1031-1038.
3. Naeye RL, Peters EC, Bartholomew M, Landis JR. Origins of cerebral palsy. *Am J Dis Child* 1989, 143: 1154-1156.
4. Painter MJ. Fetal heart rate patterns, perinatal asphyxia and brain injury. *Pediatr Neurol* 1989, 5: 137-144.
5. Freeman JM, Nelson KB. Intrapartum asphyxia and cerebral palsy. *Pediatrics* 1988, 82: 240-249.

Subrata Sarkar,
Anil Narang,
*Department of Pediatrics,
Postgraduate Institute of Medical
Education and Research,
Chandigarh 160 012.*

Reply

The etiopathogenesis of cerebral palsy is a complex one and the exact etiology

remains unknown till to date. The recent changing trend in the etiology of cerebral palsy especially the controversial role of birth anoxia or perinatal asphyxia, which we