REFERENCES

1. Vashishtha VM, Bansal CP, Gupta SG. Pertussis vaccines: Position paper of Indian Academy of Pediatrics (IAP). Indian Pediatr. 2013;50:1001-9.
2. CDC. Updated recommendations for use of tetanus toxoid, reduced diphtheria, and acellular pertussis vaccine (Tdap) in pregnant women – Advisory Committee on Immunization Practices (ACIP), 2012. MMWR. 2013;62:131-5.
3. Halperin SA, Sweet L, Baxendale D, Neatby A, Rykers P, Smith B, *et al*. How soon after a prior tetanus-diphtheria vaccination can one give adult formulation tetanus-diphtheria-acellular pertussis vaccine? Pediatr Infect Dis J. 2006;25:195-200.
4. Talbot EA, Brown KH, Kirkland KB, Baughman AL, Halperin SA, Broder KR. The safety of immunizing with tetanus-diphtheria-acellular pertussis vaccine (Tdap) less than 2 years following previous tetanus vaccination: Experience during a mass vaccination campaign of healthcare personnel during a respiratory illness outbreak. Vaccine. 2010;28:8001-7.
5. Prevention of pertussis, tetanus, and diphtheria among pregnant and postpartum women and their infants: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR. 2008;57:1-51.

Outcome of ELBW Neonates: A Raveling Picture

We appreciate the efforts of the authors for presenting the comparison of the two cohorts of extremely-low-birth-weight (ELBW) babies, and to appraise the care of these babies with many modern and available modalities [1]. However, we wish to make a few comments:

1. It was concluded that survival of E2LBW neonates has improved whereas authors have stated many was of times that the overall survival was similar in two cohorts.
2. It was also observed that some important factors for mortality and morbidity were significantly higher, namely respiratory distress syndrome (RDS) and sepsis, in 2001-02 cohort [2].
3. Authors state that there was a significant decrease in mortality in 28 to 30 weeks neonates in 2009-10 cohort without comparing the baseline characteristics and interventions in two cohorts.
4. As both the groups had a similar rate (64%) of mechanical ventilation, it may not be appropriate to associate this to intraventricular hemorrhage (IVH) without any supporting data on determinants like hypoxemia, hypercarbia, peak inflation pressure and duration of ventilation [3,4]. However, higher use of high frequency ventilation may be related to IVH [5].
5. It is evident from the data that 2009-10 cohort had significantly more cases with maternal and obstetric complications, low Apgar scores and lesser birth weight. The absence of comparison of severity of illness at the time of admission is a major limitation to reflect a reliable image of optimization or improvement in newborn care.

A GUPTA AND S SRIVASTAVA
Department of Pediatrics and Neonatology, Fortis Hospital and Research Centre, Faridabad, Haryana, India.
dramitgupta2001@gmail.com

REFERENCES

1. Mukhopadhyay K, Louis D, Murki S, Mahajan R, Dogra MR, Kumar P. Survival and morbidity among two cohorts of extremely low birth weight neonates from a tertiary hospital in Northern India. Indian Pediatr. 2013;50:1047-50.
2. Sehgal A, Telang S, Passah SM, Jyothi MC. Maternal and neonatal profile and immediate outcome in ELBW babies. Indian Pediatr. 2003;40:991-5.
3. Dykes FD, Lazzara A, Ahmann P, Blumenstein B, Schwartz J, Brann AW. Intraventricular hemorrhage: a prospective evaluation of etiopathogenesis. Pediatr. 1980; 66:42-9.
4. Aly H, Hammad TA, Essers J, Wung JT. Is mechanical ventilation associated with intraventricular hemorrhage in preterm infants? Brain Dev. 2012;34:201-5.
5. Cools F, Offringa M. Meta-analysis of elective high frequency ventilation in preterm infants with respiratory distress syndrome. Arch Dis Fetal Neonatal Ed.1999; 80:F15-F20.

AUTHOR'S REPLY

We thank authors for their comments on our article. We would like to clarify some of their queries:

1. The overall survival in this cohort of ELBW neonates did not change between the two epochs as clearly highlighted in the abstract; however, among neonates between 28 to 30 weeks, survival had significantly improved from 2001-02 to 2009-10.

2. The rate of sepsis and RDS were higher in the 2001-02 cohort but several other adverse factors including PDA and IVH were more common in the 2009-10 cohort. Hence it is difficult to attribute any of these factors as isolated or independent causes for mortality and morbidity in either cohort.
3. The two cohorts did not differ significantly in the baseline characteristics. Gestational age, birth weight (except for a 40g difference), gender, SGA, obstetric complications, Apgar scores at 1 and 5 minutes were comparable between the two groups. The only two factors that might have had an impact is the use of antenatal steroids and surfactant therapy.
4. We agree that the rates of mechanical ventilation were similar between the two groups. We actually meant high frequency ventilation when we referred mechanical ventilation. We thank you for pointing this out.
5. We agree with the authors that we did not compare the severity of illness score among the two cohorts. Using such a score could have improved the comparability between the two cohorts. This has already been mentioned as one of the drawbacks of our study.

KANYA MUKHOPADHYAY
Department of Pediatrics, PGIMER, Chandigarh, India.
kanyapupul@yahoo.com

Pediatric Empyema Thoracis – Role of Conservative Management

We read with interest the recent article [1] regarding conservative management of empyema thoracis. The authors comment that local availability and cost, especially with surgical techniques such as videoscopy-assisted thoracic surgery (VATS), limits surgical options. However, often the advantages of surgery are not discussed with the family. Children are often referred late to the pediatric surgeon in a malnourished state [2]. The families usually end-up spending all their meager resources on consultations and prolonged courses of expensive broad spectrum antibiotics far more than the cost of surgical debridement in a government hospital.

Ultrasonography at admission showed pleural thickening in two, loculations in six and organized fluid in seven patients. However, computed tomography (CT) of the chest showed loculation, collapse and pleural thickening in all three patients where it was done. These bear out the fact that accurate staging is possible only with a contrast enhanced CT scan [2]. While we agree that patients in early stage (Stage I) do not require surgery, those in Stage II and III recover faster with surgical intervention (VATS or open surgery). Interestingly, there is no mention of staging of the disease [3] in this study. What is disturbing to note is that in this series, at discharge, pleural thickening was present in 84% with overcrowding of ribs in 60%. This persisted in 44% and 32%, respectively at 6 weeks follow-up, with 8% having scoliosis and one unexplained mortality.

We have published a large series of surgically managed Stage III pediatric empyema thoracis [4]. Our experience has been that complete removal of pus and debris – that is often too thick to come out of a standard chest tube – and the thick pleura encasing the lung surface leads to full lung expansion. This promotes early recovery and discharge from hospital [4,5]. Contrast enhanced CT scan improves decision making regarding early surgical intervention avoiding prolonged antibiotic treatment, morbidity and mortality.

PREMA MENON AND KLN RAO
Department of Pediatric Surgery, Chandigarh, India.
menonprema@hotmail.com

REFERENCES

1. Kumar A, Sethi GR, Mantan M, Aggarwal SK, Garg A. Empyema thoracis in children: a short term outcome study. Indian Pediatr. 2013;50:879-82.
2. Menon P, Kanojia RP, Rao KLN. Empyema thoracis: surgical management in children. J Indian Assoc Pediatr Surg. 2009;14:85-93.
3. The American Thoracic Society Subcommittee on Surgery. Management of nontuberculous empyema. Am Rev Respir Dis. 1962;85:935-6.
4. Menon P, Rao KLN, Singh M, Venkatesh MA, Kanojia RP, Samujh R, *et al*. Surgical management and outcome analysis of stage III pediatric empyema thoracis. J Indian Assoc Pediatr Surg. 2010;15:9-14.
5. Shankar KR, Kenny SE, Okoye BO, Carty HM, Lloyd DA, Losty PD. Evolving experience in the management of empyema thoracis. Acta Pediatr. 2000;89:417-20.