LETTERS TO THE EDITOR

Effect of Delayed Contact on Neonatal Behavior

Dr. G. Gathwala and Dr. I. Narayanan's report on *Effect of delayed contact on neonatal behavior,* implies that temporary separation of a neonate (2.8 ± 1.0 days) from his mother would affect his behavior which could be observed even at the end of 4 weeks(1). Their data on interactive processes, motor and organizational processes on initial assessment shows a significant difference in behavior between the two groups of babies. Does this mean a lack of maternal involvement for 24-48 hrs has already affected the behavior? Is the neonate able to differentiate between the mother figure and residential elder women and alter its behavior right from day 2?

A curve of recovery, plotted through several assessments in first month, would be a better method of characterising neonatal behavior.

In our study on small for gestational age (SGA) babies, we have reported that they perform better than (AGA) babies on orientation cluster(2). We have also commented that this superior performance may be due to more frequent handling of these small infants by the mother. Analysis of data on those babies managed in our nursery with the mother coming intermittently for breast feeds does not show any difference in their behavior and that of SGA babies nursed by the mother on her bed.

The data provided in the article does not adequately prove that lack of maternal contact for a short period of time has an effect on neonatal behavior. It would have been appropriate to have the two groups of neonates with similar pattern of behavior at initial assessment.

R.S. Iyer,
Department of Pediatrics,
Kasturba Medical College and Hospital,
Manipal 576 119,
Karnataka.

REFERENCES

1. Gathwala G, Narayanan I. Cesarean section and delayed contact: Effect on baby's behavior. Indian Pediatr 1990, 27: 1295-1299.
2. Iyer RS, Chetan R, Venkatesh A. Neonatal behavior of small for gestational age infants. Indian Pediatr 1989, 26: 987-991.

Reply

We appreciate the interest of Dr. Iyer in our article. The significant differences at the initial assessment for interactive behavior and motor activity between the 2 groups would obviously imply that 24-48 hours' separation immediately after birth affects these aspects of a baby's behavior. Separation, involved the cesarean section (CS) babies' stay in the nursery. Feeding, cleaning and changing, here was done according to a time schedule and offered very little human interaction. This, possibly, also contributed to the observed differences in behavior.

The query regarding the neonate being able to differentiate between the mother

figure and the residential elder woman and alter its behavior right from day 2 is not relevant. The normal vaginal delivery (NVD) babies were taken care of by the mother and the CS babies were in the nursery under the care of the nursing staff, prior to the initial assessment (day 2). Early separation was probably not the only reason for observed differences in behavior at 4 weeks. The mothers in the CS group having undergone major surgery were apprehensive even till the time of the follow up visit. The residential elder woman was the main caretaker for this group (CS) of babies whereas it was the mother in case of the NVD babies. The mother probably was a more positive influence on the babies' behavior.

Babies in our nursery were bottle fed by the nursing staff and not by the mother as in your data. The mother, we believe, provided a more positive influence on the baby, resulting in this group showing a better interactive behavior. This is akin to the superior performance of your SGA babies due to frequent handling(2).

The inference to be drawn from our study is that early separation (by admission to the nursery) in babies delivered by cesarean section to the poor socio-economic class of mothers in northern India affects the baby's behavior.

We do not agree with your suggestion. It would be unethical to separate NVD babies from their mothers. The study was planned according to the prevailing hospital practices and obviously the results should only be interpreted in that context.

G. Gathwala,
I. Narayanan,
Kalawati Saran Children's Hospital,
New Delhi 110 001.

Treating Neonatal Sepsis

Results of survival (77.4%) following exchange transfusion (ET) for severe neonatal sepsis reported by Dalvi *et al.*(1) appear encouraging, but need reconfirmation by multicentric trials.

Of the last 12 cases of neonatal sepsis with sclerema, but without meningitis, treated by us without ET, 9 survived. We used a third generation cephalosporin, amikacin, metronidazole, fresh plasma, hydrocortisone and intravenous immunoglobulin in the therapeutic recommended dose(2) in all cases. A saphenofemoral long line is inserted to prevent complications of repeated venepunctures. Although numbers treated so far, with this therapeutic regime, are small, results of such intervention before irreversible microcirculatory changes are established, seem promising.

A significant percentage of neonatal sepsis occurs as a result of anaerobic infections(3). Most laboratories do not perform anaerobic cultures, and standard antibiotics used by the authors, do not treat anaerobes. It, hence seems rationale to add an antimicrobial such as metronidazole to combat such infections. Of 65 neonates treated by us with metronidazole, no ill effects have been observed so far.

To state that sclerema still carries a uniformly poor outcome, suggest that therapeutic advances almost over the last 50 years have been ineffective. We need to relook at sclerema as an ominous sign, as references, quoted by Dalvi *et al.*(1) date back to 1948 and 1966. The moot point is, at what moment of time during sepsis should ET be done. Early ET, before evidence of a disturbed microcirculation, may result in good outcome; however, if done