(Respond: Dr Shevell, Room A-514, Montreal Children's Hoispital, 2300 Tupper Street, Montreal, Quebec H3H IP3, Canada).

COMMENT. The authors list further investigations to identify the cause of spastic diplegia in the high proportion (46%) of patients undiagnosed. These investigations include repeat MRI, spinal imaging, voxel-based morphometry, and diffusion-weighted MRI in the acute stage of PVL.

THIRD VENTRICLE ENLARGEMENT IN NEONATES WITH TRISOMY 21

Measurements of routine head sonographic scans of 57 term infants with trisomy 21 born between 2000 and 2005 were performed within 7 days after birth and were compared with scans of 21 randomly selected, healthy, term infants without trisomy 21 at Shaare Zedek Medical Center, Jerusalem; Ben Gurion University of the Negev, Beer Sheva; and Hadassah University Hospital, Jerusalem, Israel. The test and control neonates were the same gestational ages (39+/-1 weeks), but trisomy 21 infants were smaller and had smaller head circumferences than controls (32.9 cm vs 34.9 cm; P=0.001). The width and length of the third ventricle were increased in infants with trisomy 21. Vertical measurements of the lateral ventricle were similar for the 2 groups. (Schimmel MS, Hammerman C, Bromiker R, Berger I. Third ventricle enlargement among newborn infants with trisomy 21. **Pediatrics** May 2006;117:928-931). (Respond: Michael S Schimmel MD, Department of Neonatology, Shaare Zedek Medical Center, PO Box 3235, Jerusalem 91031, Israel).

COMMENT. The authors speculate that the enlargement of the third ventricle demonstrated in neonates with trisomy 21 may reflect hypoplasia of the thalamus, hypothalamus, and deep white matter, which are involved in cognitive processes of attention, verbal and visuospatial memory. Prefrontal, cerebellar, and hippocampal functions are also affected in trisomy 21.

SERUM BILIRUBIN LEVELS AND DEVELOPMENTAL OUTCOME

The neurodevlopmental risks associated with neonatal total serum bilirubin levels of 25 mg/dL or higher in 140 affected infants were compared with 419 randomly selected controls from a cohort of term-infants born 1995-1998 in Kaiser Permanente hospitals in northern California. Peak bilirubin levels were between 25 and 29.9 mg/dL in 130 newborns with hyperbilirubinemia and 30 mg/dL or higher in 10 newborns. Phototherapy was used in 136 cases and exchange transfusion in 5. There were no cases of kernicterus. In subjects followed for at least 2 years, scores on cognition tests were similar in the hyperbilirubinemia and control groups. Questionable or abnormal neurologic findings were present in 14 children (17%) with hyperbilirubinemia vs 48 of controls (29%); P=0.05. Reported behavioral problems were not significantly different in the 2 groups. Those with positive direct antiglobulin tests for immune-mediated hemolytic disease in the hyperbilirubinemia group had lower scores on cognition tests but not more neurologic or behavioral problems. (Newman TB, Liljestrand P, Jeremy RJ, et al. Outcomes among newborns with total serum