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Reply:

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REPLY:

We appreciate the comments of Dr Lynøe and colleagues.

The objective of our study was to determine the prevalence, size, location, and appearance of subdural hemorrhage (SDH) in asymptomatic term infants and the natural history of the hemorrhage until imaging resolution. Determining the developmental outcome of neonatal SDH was not a primary or secondary outcome objective of our study. We did review the development of those children with birth-related SDH seen at their 2-year well-child visit and reported that 6/43 (14%) were found to have early speech and language delays and 1 patient (2%) was suspected of having an autism spectrum disorder, given early language and social delays.[1]

Dr Lynøe and colleagues raised concern about a paucity of literature on the prevalence of speech delay in children younger than 5–6 years of age, so comparison between our groups at 2 years with historical controls is problematic. We would suggest that the prevalence of early speech and language delays might be even higher than that reported in older children because some early delays resolve with long-term follow-up and early intervention. This is certainly true of a subset of children who are "late talkers." The prevalence of speech delay in our study is thought to be consistent with that found in the literature, including a recent publication by Mondal et al,[2] who report a speech and language delay prevalence of 27% in children younger than 3 years of age seen in an "Under Five" clinic. These children were screened using a language-evaluation scale as well as a developmental screening tool. Mondal et al report that the developmental screening device used may not suffice as a screening tool for speech and language delay because it had a sensitivity of only 33% in detecting speech delay, likely because the tool had few language items for groups younger than 24 months of age.

Suggesting any association of neonatal SDH with subsequent developmental delay, to include isolated speech delay, on the basis of our study results is not recommended because we did not investigate other risk factors for developmental delay, which may include male sex, family history of speech and language delay, low parental educational level, low birth weight, lower socioeconomic status, environmental exposure, prenatal complications, impaired hearing, and so forth.[2,3]

As mentioned by Lynøe and colleagues, we did not review the records of those neonates with normal imaging findings at birth because developmental outcome was not the objective of our study. A long-term, prospective study would be helpful in addressing this question of long-term sequelae related to birth SDH.

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