Strabismus linked to multiple factors associated with spina bifida

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The prevalence of strabismus in children with spina bifida myelomeningocele was associated with multiple factors, according to a study.

A high prevalence of strabismus among patients with spina bifida myelomeningocele (SBM) is commonly attributed to hydrocephalus, but SBM is associated with myriad complications, the study authors said.

“Some of these factors (lower birth weight and younger gestational age) are also associated with strabismus in the general population, whereas the association of strabismus and spinal lesion level is likely unique to SBM and may be related to the more severe brain dysmorphology associated with upper level spinal lesions in these children,” they said.

The study included 112 children with a mean age of 10 years and SBM. Data were culled from the Spina Bifida Assessment of Neurobehavioral Development International study conducted in Houston and Toronto.

Mean gestational age was 39 weeks, and mean maternal age at birth was 28 years. Mean birth weight was 3,322 g. Nineteen percent of subjects had respiratory distress at birth; the mean number of shunt revisions was 1.76.

Forty-two subjects had strabismus. Maternal age and respiratory distress correlated poorly with presence of strabismus. However, lower birth weight (P = .05) and younger gestational age (P = .01) were associated with strabismus.

Strabismus was more prevalent among subjects who had at least one shunt revision (P = .038). A higher likelihood of strabismus was associated with greater proximity of spinal lesions to the brain (P = .038), the authors said.