Multidisciplinary Case Conference III: Developmental Delay

A one-year-old boy is presenting with delayed motor milestones on referral from a neonatal follow-up clinic. History is remarkable for 26 week prematurity and birth weight of 1.25 pounds. Neonatal complications included poor oral feeding, retinopathy of prematurity, and bronchopulmonary dysplasia (BPD) with 5 days of intubation and discharge home with supplemental oxygen discontinued after 4 weeks. Pertinent examination findings include poor head and trunk control, inability to sit, obligatory asymmetric tonic neck reflex (ATNR), bilateral leg stiffness, and right esotropia.

Discussion Points

Neurology: Examination and diagnostic evaluation of a child with delayed motor development

Neurology: Definition of cerebral palsy, appropriate diagnostic evaluation and related medical concerns/prognosis

Neuroradiology: Neuroimaging of the immature brain

Ophthalmology: Vision in cerebral palsy

Further case development:

He returned for follow-up care at age 7. Interim history included:

1. History of febrile seizures now resolved. He does not take anticonvulsants.
2. Poor feeding and slow growth
3. Spasticity in all extremities
4. Hip dysplasia with orthopedic releases at age 2 and pelvic osteotomy at age 5

Examination reveals weight is 31#, length is 41”, head circumference is 47cm, all below third percentile. Speech is functional at a three year equivalent for language skills. He has spastic quadriplegia with poor trunk strength, strong extensor tone which complicates positioning even in sitting, and a persistent ATNR. In supported sitting, head control is good, but reach and grasp are poorly developed. He can combat crawl independently, but is dependent for all other physical activities.

Discussion Points

Rehab Medicine: Developing rehabilitation plans for young children

Neurosurgery: Neurosurgical approaches to spasticity and outcomes