

progressive stenosis in those with spastic and dystonic CP, at no common cervical level, and at GMFCS levels I-III.

Conclusions: New neurologic findings or changes in function in people with CP must be fully investigated and cannot be explained as progression of their CP. Even minor changes noted on scans can result in functional changes in those with already existing impairments in motor control.

Poster 316: Cancelled

Poster 317

Do OnabotulinumtoxinA Injections Affect Seizure Threshold in Children? A Report on 2 Cases.

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Disclosures: K. Rothman, None.

Patients or Programs: Patient 1, a 35-month-old girl, former 30.5-week-old preemie, with spastic diplegic cerebral palsy. Patient 2, a 25-month-old girl with congenital brain malformation and left spastic hemiparesis.

Program Description: Both children underwent OnabotulinumtoxinA (obtx-A) motor point blocks of gastrocnemii muscles for management of spasticity. Patient 1 had bilateral gastrocnemii injected, whereas patient 2 just the left. Both subjects received a total of 50 units of obtx-A. Patient 1 weighed 10.8 kg, and patient 2 weighed 12.2 kg. Within 24 hours, patient 1 developed new onset status epilepticus. Patient 2 had a seizure 4 days after the injection.

Setting: University tertiary care pediatric hospital.

Results: Both patients were placed on long-term antiepileptic drugs.

Discussion: Obtx-A is commonly used to treat spasticity in children with cerebral palsy. It is generally thought to have a good side-effect profile, though the FDA has recently required a Black Box warning. There is evidence that obtx-A may have central side effects. Research suggests that Obtx-A may affect spinal cord circuitry, the brainstem, and the motor cortex. There are several proposed mechanisms by which these central circuits are affected, including blocking gamma motor endings and reducing spindle afferent input from the treated muscle, plastic changes at both the level of the motor neuron and muscle, and retrograde transport and transcytosis. Central nervous system disruptions may potentially lower seizure threshold, especially in children with underlying risk factors for epilepsy. Seizures have been reported after obtx-A injections, however, this has been poorly documented. The above 2 cases developed seizures shortly after their injections. This raises concern that obtx-A may increase risk of seizures in children receiving obtx-A injections.

Conclusions: Obtx-A motor point blocks may increase risk of seizure in children at risk for seizures.

Poster 318

Functional Improvement in Swallowing and Social Cognition After Intrathecal Baclofen Pump Placement in a 4-Year-Old Boy With Quadriplegic Cerebral Palsy Secondary to Shaken Baby Syndrome: A Case Report.

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Disclosures: S. Vadivelu, None.

Patients or Programs: A 13-month-old boy with spastic quadriplegic cerebral palsy (CP) secondary to shaken baby syndrome (SBS) seen in the Physical Medicine and Rehabilitation (PM&R) clinic for developmental delays and spasticity management.

Program Description: The patient had developmental delays, vision impairments, spastic quadriplegia, and dysphagia due to shaken baby syndrome. Botulinum toxin A and clonazepam were initiated to control spasticity and oral baclofen was added later. He received physical and occupational therapies. Multiple modified barium swallow studies (MBS) were performed revealing dysphagia requiring no oral intake. To further control spasticity, at age 2, he underwent an intrathecal baclofen (ITB) trial. His sitting balance improved significantly, and spasticity was reduced during the trial, but pump placement was delayed secondary to child custody issues. Two years later, the patient underwent ITB pump placement. He transferred to inpatient rehabilitation 1 day after pump implantation for dose adjustments and therapy.

Setting: Outpatient/inpatient rehabilitation center.

Results: Three days after pump placement, improvements in spasticity and dysphagia were evident. The patient was able to purposefully activate switches, make choices, and "give me 5." He was also vocalizing, prompting a request for an MBS. The MBS showed improvements in swallowing; therefore, his diet was advanced from nothing by mouth to pureed solids and thin liquids. Functional Independence Measure (FIM) scores also reflected a change in social interaction, memory, and problem solving. FIM scores advanced from total assistance (1) to supervision (5)/modified independent (6) in these areas.

Discussion: This case illustrates that ITB not only reduced spasticity, but also resulted in functional improvements in swallowing and in communication as measured by MBS and FIM scores.

Conclusions: ITB can result in functional improvements. Further research is warranted to determine if ITB can help other CP patients with dysphagia.

Poster 319

Functional Outcomes in 4 Children With Transverse Myelitis: A Case Series.

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