Caregivers of 113 children with CP aged 4-12 years [mean (SD) age = 7.4 (2.5) years; 61.9% male] completed the Strengths and Difficulties Questionnaire, Sleep Disturbance Scale for Children and a sleep quality questionnaire to assess child behavior, sleep and nighttime pain, respectively. OUTCOMES AND RESULTS:

25.6% of children (17.6% preschool-aged; 29.1% school-aged) had behavioral difficulties. Sleep problems (odds ratio [OR] 9.1, 95% confidence interval [CI] 3.4-24.4) and nighttime pain (OR 4.1, 95% CI 1.5-11.5) were associated with behavioral difficulties. Sleep problems remained significantly associated with behavioral difficulties (adjusted OR 7.5, 95% CI 2.6-21.4) when adjusted for nighttime pain, age and non-ambulatory status. CONCLUSIONS AND IMPLICATIONS:

Behavioral difficulties were reported in one in four children with CP and were associated with sleep problems and nighttime pain. Identifying and treating behavioral difficulties, sleep problems or nighttime pain is important in the care of children with CP [1].

2017

A study aimed to investigate beneficial and adverse effects of Intrathecal Baclofen (ITB) bolus injection and pump therapy in patients with cerebral palsy (CP) and to compare outcomes to patients with acquired brain injury such as traumatic brain injury and cerebral hypoxia. ITB test trials were performed in 37 patients (19 CP and 18 acquired brain injury). Based on ambulatory function, CP patients were divided into 2 groups: 11 patients with nonambulatory CP and 8 patients with ambulatory CP. Change of spasticity was evaluated using the Modified Ashworth Scale. Additional positive or negative effects were also evaluated after ITB bolus injection. In patients who received ITB pump implantation, outcomes of spasticity, subjective satisfaction and adverse events were evaluated until 12 months post-treatment. After ITB bolus injection, 32 patients (86.5%) (CP 84.2% versus acquired brain injury 88.9%) showed a positive response of reducing spasticity. However, 8 patients with CP had negative adverse effects. Particularly, 3 ambulatory CP patients showed standing impairment and 1 ambulatory CP patient showed impaired gait pattern such as foot drop because of excessive reduction of lower extremity muscle tone. Ambulatory CP patients received ITB pump implantation less than patients with acquired brain injury after ITB test trials (P = .003 by a chi-squared test). After the pump implantation, spasticity was significantly reduced within 1 month and the effect maintained for 12 months. Seventeen patients or their caregivers (73.9%) were very satisfied, whereas 5 patients (21.7%) suffered from adverse events showed no subjective satisfaction.

ITB therapy was effective in reducing spasticity in patients with CP and acquired brain injury. Before ITB pump implantation, it seems necessary to perform the ITB bolus injection to verify beneficial effects and adverse effects especially in ambulatory CP [2].

1)
Horwood L, Li P, Mok E, Oskoui M, Shevell M, Constantin E. Behavioral difficulties, sleep problems, and nighttime pain in children with cerebral palsy. Res Dev Disabil. 2019 Oct 17;95:103500. doi: 10.1016/j.ridd.2019.103500. [Epub ahead of print] PubMed PMID: 31630025.
2)
Yoon YK, Lee KC, Cho HE, Chae M, Chang JW, Chang WS, Cho SR. Outcomes of intrathecal baclofen therapy in patients with cerebral palsy and acquired brain injury. Medicine (Baltimore). 2017 Aug;96(34):e7472. doi: 10.1097/MD.0000000000007472. PubMed PMID: 28834868.