

to traditional rehabilitation treatment, and persists at the 3-month follow-up.

Friday, November 5, 2010

4:15 5:45 pm

Washington State Convention Center

422. PEDIATRIC RESEARCH AND CLINICAL PEARLS

Adults With Cerebral Palsy Who Had a Rhizotomy as a Child: Long-term Follow-up.

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Disclosures: E. A. Hurvitz, None.

Objective: To describe medical, functional and psychosocial outcomes and satisfaction of adults with cerebral palsy (CP) who had a rhizotomy as a child.

Design: Retrospective cohort.

Setting: Academic medical center.

Participants: Adults and adolescents (16 years or older) with a diagnosis of CP who had a selective dorsal rhizotomy as a child or young adolescent.

Interventions: Surveys administered in person or on the phone.

Main Outcome Measures: Subjects were administered the Satisfaction with Life Scale (SWLS), Gross Motor Functional Classification Scale (GMFCS) and Manual Abilities Classification System. Subjects were asked about general health, and if they felt that the rhizotomy had affected their QOL. They were also asked if they would recommend the rhizotomy to others.

Results: There were 31 subjects ages 16-39 years (mean 24.1 years; SD 5.2), mean age at rhizotomy 6.6 years (SD 4.0), mean follow up of 17.5 years (SD 3.0), and 53% men. About half the informants were self and half were parent or caregiver. The GMFCS levels were I, 6%; II, 16%; III, 26%; IV, 36%; V, 16%. Forty-eight percent thought they were in excellent or very good health, whereas 42% reported good health. Seven baclofen pumps had been placed some time after rhizotomy, but 2 were removed. Thirty-nine percent noted chronic pain, most commonly in the back and legs. The mean score on the SWLS was 26.0. Higher perception of health correlated with higher SWLS scores. There was also a trend ($P=.06$) toward lower SWLS scores in those who reported pain. Sixty-four percent reported that the rhizotomy had improved their QOL, whereas 10% thought it decreased their QOL. Seventy-one percent would recommend the rhizotomy to others. A perception of improved QOL predicted a positive recommendation ($P<.01$).

Conclusions: Adults and adolescents were generally satisfied with childhood rhizotomy outcomes and would recommend it, especially if they had a perception of improved quality of life. These adults were generally healthy, although they had significant pain, common in adults with CP. The relationship between back pain and rhizotomy, which involves a laminectomy, needs more investigation.

Physical and Social Participation Factors Impacting Quality of Life in Ambulatory Children and Adolescents With Cerebral Palsy.

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Disclosures: K. Kolaski, None.

Objective: To examine the relative contributions of physical characteristics, specifically body mass index (BMI) and severity of motor function (GMFCS level), and social participation to quality of life (QoL) in ambulatory children and adolescents with cerebral palsy (CP).

Setting: 5 clinic sites in the U.S. and Canada.

Participants: N=112 (68 M, 44 F) aged 6-17 years with CP whose motor function was rated level I-III with the Gross Motor Functional Classification System (GMFCS).

Main Outcome Measures: Weight, height, GMFCS level, social participation, and QoL were obtained. Gender- and age-specific BMI percentiles were calculated and categorized as underweight, healthy weight, overweight, or obese using CDC parameters. Participation was measured from 2 questions that estimated the frequency of time spent with friends or in group activities. QoL was measured with the KIDSCREEN-10, a well-validated generic measure of well being that is independent of functioning and management of symptoms. The contribution of physical (BMI, GMFCS) and social (participation) factors on QoL was tested in hierarchical linear regression models.

Results: Gender (M:F = 1.5:1) and race/ethnicity were similar to published reports on CP and U.S. Census Bureau statistics. Participants in the 3 GMFCS levels did not differ by age (mean 10.8 ± 3.6 years), gender, race/ethnicity, socioeconomic status, BMI percentile, participation, or QoL. Approximately 30% of the participants were overweight or obese (>85th percentile) based on gender and age norms for typically developing children. BMI and participation contributed significantly to QoL in separate regression models, and maintained their statistically significant independent contributions to QoL when both were in the same regression model that included GMFCS.