QOS-12. THE ASSOCIATION OF SOCIODEMOGRAPHIC AND MEDICAL FACTORS WITH CLINICAL OUTCOMES ASSESSMENTS (COAS) IN CHILDREN WITH EPENDYMOMA: RESULTS OF THE PEDIATRIC EPENDYMOMA OUTCOMES (PEO) PROJECT

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BACKGROUND: Children with ependymoma frequently have recurring cycles of progression/treatment with resultant morbidity. Therefore, identifying sociodemographic and medical contributors associated with worse clinical outcomes is important for improved management. METHODS: Parents of children with ependymoma completed a national (U.S.) online survey that included parent-proxy PROMIS battery measures, educational status, household income, and child medical/treatment information. Analysis utilized an effect size measure (Hedge’s g) to estimate the association between COAs and studied variables. RESULTS: Twenty-seven families participated. Patients were 59% male, 85% non-Hispanic white with a median of 11 (range, 5-22 years). Households included 30% without a college degree and 48% with less than $80,000 annual income. Over half of children had received chemotherapy (56%), multiple resections (36%), and experienced recurrence (52%). Lower household education status correlated with worse upper extremity functioning (g = 0.67), fatigue (g = -0.64), and physical mobility (g = 0.57); conversely, an advanced educational background predicted poorer psychological outcomes (anxiety g = 0.43, anger g = 0.56, and peer relationships g = -0.64). Lower income was associated with more depression (g = -0.79) and anger (g = -0.59). Chemotherapy was associated with lower mobility (g = -0.42) and UE function (g = -0.77), but did not impact psychological outcomes. Multiple resections were associated with higher depression (d = 0.56), but not with physical functioning/fatigue. CONCLUSION: Household educational status and income impact social, psychological and physical dysfunction reports in children with ependymoma. Unexpectedly, chemotherapy treatment was associated with worse physical functioning, whereas multiple surgical resections correlated with depression. These findings highlight the potential importance of COAs in augmenting more traditional assessments of treatment effect such as response and survival.