

Abstract
Poster Session C

Friday, November 15, 2019 8:00 am – 9:30 am

DEVELOPMENTAL AND PEDIATRIC: OTHER

C-54

Neuropsychological Testing Profiles of Rare Conditions: A Case of Twin-to-Twin Transfusion Syndrome (TTTS) in a “Donor” Twin

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Objective: TTTS is a rare condition occurring in approximately 5-15% of monochorionic twins (sharing a single placenta), in which there is an abnormal arterio-venous connection resulting in excess blood flow to one fetus (“recipient”) and too little to the other (“donor”) (Graeve et al., 2012). Consequently, the “donor” develops in low amniotic fluid, while the “recipient” develops in high amniotic fluid. Neurologic and cardiogenic abnormalities have been identified in the neonatal period and in the long-term for both twins (Wagner, Repke, & Ural, 2013). In terms of neurodevelopmental morbidities, 11.6% of children (age 6) endure mild neurologic impairment and 8.9% experience severe neurologic impairment (Graeve et al., 2012). **Methods:** The present case involves a 7-year-old, right-handed, single female with a medical history of TTTS (“donor”) referred for neuropsychological testing to explore challenges with learning, attention, memory, reading, and spelling. Upon initial neuropsychological consultation, there were suspected neurodevelopmental optometric deficits, so the patient was also referred for ocular/vision testing. This revealed a significant convergence insufficiency/binocular dysfunction (eye teaming), ocular motor dysfunction (tracking), and visual disturbance (visual sensory overload) deficiencies. **Results:** Neuropsychological testing revealed a neurodevelopmental disorder characterized by a language learning disability with mixed-dyslexia, ADHD - combined type, an executive functioning disorder, and neuro-optometric deficiencies interfering with neurocognitive functioning. **Conclusion:** The present case provided further evidence of long-term neurodevelopmental sequelae associated with TTTS (“donor”). Neuropsychological testing elucidated the severity and type of neurodevelopmental impairments and was instrumental in the patient receiving an Individualized Education Program (IEP), which incorporated the accommodations contained in the neuropsychological diagnostic report.