

Advancement therapeutic modalities in immune modulation for neuro autoimmunities

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Abstract

Introduction: Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections (PANDAS) is a pervasive problem lacking a consistent treatment protocol (Sigra et al, 2018). Since it was first described in the scientific literature (Swedo, Leonard, Garvey, Mittleman, Allen, Perlmutter, Lougee, Dow, Zamkoff, & Dubbert, 1998), numerous studies have elucidated details regarding the proposed pathophysiology, clinical characteristics, and underlying areas of neurological dysfunction (Orefici, Cardona, Cox, & Cunningham, 2016). In this paper, we will present a case in which a 16 year-old girl who presented with PANDAS and Sydenham chorea, as well as postconcussional syndrome, is treated with our multi-modal approach. **Case presentation:** The subject presented to the office with complaints of choreiform movements, “jumpy feeling legs”, difficulty with concentration/memory, GI symptoms, fatigue, and anxiety. Previous work ups for these complaints include MRI, blood tests, and stomach scan with no resulting diagnosis. **Management and outcome:** The patient underwent two intensive courses of treatment of two weeks duration. Treatment consisted of functional neurological rehabilitation, IV infusions, and functional medicine interventions. The patient experienced subjective improvements including less discomfort and decreased anxiety. Objective improvements were shown in neurological function through physical exam and diagnostic procedures. **Discussion:** Currently, there is no established “gold standard” for the treatment of PANDAS and related disorders. We present a novel paradigm of treatment for patients with PANDAS, and related disorders, in the form of a case study



Biography

Joshua Flowers is the owner and founder of Revive Treatment Centers in Denver, CO, a neurological rehabilitation and optimization facility focusing on traumatic brain injuries, post-concussion syndrome, neuroimmunology, neurodegeneration, stroke, depression and PTSD. His facility is acclaimed as the most progressive in science-based applications for neurological recovery, utilizing the most robust suite of advanced neurological therapies in the world combined with a whole-body and mind approach to healing. Dr. Flowers' vision is to provide patients with the most comprehensive, thorough investigation to inform targeted therapeutic interventions, developing lasting changes for optimization of brain function.

Flowers began his education in chiropractic at Logan University where he simultaneously studied neurology. He graduated from Logan University with a doctorate in Chiropractic and shortly after graduation received diplomate in Functional Neurology. He then went on to study Childhood Development Disorders and became one of the most sought after clinicians for complicated pediatric cases. He furthered his studies in immunology and functional medicine, and continues to study the most current science-based innovations in neurological recovery, metabolic disorders, and autoimmune dysfunction.

Due to his clinical skills and detailed perspective to approaching complex conditions, he is highly respected as a clinician, leader, and innovator in the field of Functional Neurology, Neuroimmunology, Functional Medicine, and Regenerative Medicine.

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