What are PANDAS, PANS, and Related Disorders?

Pediatric Autoimmune Neuropsychiatric Disorders Associated with Strep (PANDAS) and Pediatric Acute-Onset Neuropsychiatric Syndrome (PANS) are neuropsychiatric syndromes triggered by a faulty immune system response. Students may experience symptoms after a strong stimulant to the immune system (NIMH, 2012) such as strep infection, flu, or even the common cold. In a student with PANDAS or PANS, the immune system is thought to mistakenly react and cause brain inflammation in the basal ganglia region (NIMH, n.d.; Murphy, Girardi, & Parker-Athill, 2014).

This reaction may cause neurological, psychological, and cognitive symptoms as a result of neurological inflammation (Chang et al., 2015).

PANDAS and PANS may be treated with anti-inflammatory medications (such as ibuprofen), antibiotics to treat or prevent infection, and immune-modulating therapies, such as steroids, intravenous immunoglobulins (IVIG), and plasmapheresis (PANDAS Network, 2014). Cognitive behavioral therapy and additional medications may also be important components of a student's treatment plan.

More than other conditions, PANDAS, PANS, and related conditions can produce sudden, uneven and unusual symptoms.

PANDAS and PANS may co-occur with other autoimmune disorders, immune deficiency, or other neurological or psychiatric disorders. This can make treatment and management more complex.