

Review of Evaluation and Treatment of Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcal Infections (PANDAS)

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Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infection (PANDAS) is a rare condition that is diagnosed in children who abruptly develop behavioral, verbal, motor, and/or neurologic changes that have a history of infection with group A beta hemolytic streptococcus. This gram-positive bacteria is the culprit responsible for several illnesses including pharyngitis, tonsillitis, scarlet fever, and erysipelas. Children with PANDAS appear extremely ill upon clinical presentation, with extreme compulsions such as licking shoes or barking. Patients also commonly experience behavioral regression, episodes of extreme anxiety or aggression, and motor and phonic tics such as whooping or wringing their hands. Some may even have auditory or visual hallucinations, which can appear identical to psychotic symptoms seen in schizophrenia, bipolar disorder, and lupus cerebritis.

Due to the overlap of PANDAS symptoms with OCD, Tourette's syndrome, ADHD, depression, and psychotic disorders, PANDAS is a diagnosis of exclusion that can only be made once these other conditions are ruled out. Initial treatment for PANDAS involves a round of antistreptococcal antibiotics, assuming the patient has an active strep infection. Long term management involves cognitive behavioral therapy and selective serotonin reuptake inhibitors, with benzodiazepines used as needed during acute symptomatic episodes. For patients with under the guidance of a specialist. It is estimated that nearly 150,000 cases of PANDAS go undiagnosed every year. Our project aims to increase awareness of PANDAS among clinicians and equip them to appropriately diagnose and treat it.