ASPIRE

We aspire to educate.

# PANS/PANDAS vs. OCD

At first glance, someone with PANS and someone with OCD may appear pretty similar. They both have obsessions, compulsions, anxiety, and these symptoms cause significant distress, interfere with daily functioning in school, social activities, family relationships, and normal routines. On closer examination, there are clear differences between these conditions.

| | PANS/PANDAS | OCD |
|---|---|---|
| **Onset** | • Acute, sudden onset of concurrent symptoms | • Gradual onset with a cumulative effect |
| **Course** | • Episodic<br>• Can be relapsing-remitting, chronic-progressive or chronic-static | • Not episodic |
| **Symptoms** | • Obsessions and Compulsions and/or severely restricted food intake<br>• 2 of the following concurrent symptoms:<br>  • Anxiety, Separation Anxiety<br>  • Emotional Lability, Depression<br>  • Aggression, Irritability, Oppositional Behavior<br>  • Behavioral/Developmental Regression<br>  • Deterioration of learning abilities related to ADHD<br>  • Sensory & Motor Abnormalities, Tics<br>  • Sleep disturbances, enuresis, urinary frequency chronic-static | • Obsessions<br>• Compulsions |
| **Motor Signs** | • Tics<br>• Choreiform movements | • Increased findings of neurological soft signs, including choreiform movements |
| **Neurocognitive Deficits** | • Attention<br>• Visual-spatial abilities<br>• Impulsivity<br>• Math and reading<br>• Fine motor speed | • Oculomotor response inhibition<br>• Set shifting and inhibition<br>• Cognitive flexibility and planning |
| **Age of Onset** | • Typically affects children 4-14<br>• PANDAS requires a prepubertal onset<br>• PANS does not have an age requirement | • Typical onset is between ages 8-12 |
| **Gender Ratio** | • Nearly 5:1 male to female ratio under age 8 | • Age <15 years: males slightly higher than females<br>• Post-puberty: female/male ratio increases |
| **Incidence** | • Unknown. Estimate is 10%–20% of pediatric OCD | • 2% of youths |
| **Cause** | • PANS-Multiple etiologies and disease mechanisms:<br>• Underlying neurological, endocrine, metabolic disorders<br>• Postinfectious autoimmune and neuroinflammatory disorders like PANDAS<br>• PANDAS-Postinfectious autoimmune and neuroinflammatory disorder | • Probable genetic link<br>• Possible involvement of the cortico-striato-pallido-thalamic (CSPT) pathway.<br>• Chronic avoidance of anxiety-producing stimuli is a contributing factor. |
| **Infectious Trigger** | • PANS-Association with infection but not required<br>• PANDAS-Required association with Strep | • Unknown |
| **Involvement of Basal Ganglia** | • Strong Support | • Good Support |
| **Treatments** | •Three-pronged complementary approach<br>• Treat Symptoms: psychoactive medications, psychoactive therapies (CBT and ERP), and supportive therapies<br>• Remove Inflammatory Source: antimicrobial treatments<br>• Treat Immune System Dysregulation: anti-inflammatory and/or immunomodulating medications | • Cognitive Behavioral Therapy (CBT)<br>• Exposure Response Therapy (ERP)<br>• Psychiatric medication depending on symptom severity |