The term Pediatric Acute-onset Neuropsychiatric Syndrome (PANS) describes the clinical presentation of a subset of pediatric onset Obsessive-Compulsive Disorder (OCD). PANS may also be a subset of Avoidant/Restrictive Food Intake Disorder (ARFID).

PANS or PANDAS should be considered whenever symptoms of OCD, eating restrictions or tics start suddenly, and are accompanied by other emotional and behavioral changes, frequent urination, motor abnormalities and/or handwriting changes.

Quick Links:

I. Diagnosing PANS and PANDAS


PANS stands for Pediatric Acute-onset Neuropsychiatric Syndrome and includes all cases of abrupt onset OCD and/or restrictive eating disorder, accompanied by at least 2 comorbid symptoms listed below. Unlike PANDAS, PANS does not require a streptococcal infection. While PANS is diagnosed clinically, the syndrome is believed to be the result of an immune response to one of a number of bacterial or viral infections that create autoimmune antibodies that affect the brain. The bacterial or viral infections include, but are not limited to, strep, Mycoplasma pneumonia, influenza, upper respiratory infections, and sinusitis. Psychosocial stresses can also exacerbate symptoms.

Current PANS criteria are:
• Abrupt onset or abrupt recurrence of OCD or Restrictive Eating Disorder
• Co-morbid neuropsychiatric symptoms (at least 2) with a similarly acute onset:
  1. elevated and/or separation anxiety
  2. sensory amplification or motor abnormalities (including tics and dysgraphia)
  3. behavioral regression
  4. sudden deterioration in school performance
  5. mood disorder (irritability, aggression, and/or severe oppositional behaviors)
  6. urinary symptoms
  7. somatic signs (including sleep disturbances)
• Symptoms are not better explained by a known neurologic or medical disorder

PANDAS is an abbreviation for Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal infections. The term is used to describe a subset of children and adolescents who suddenly develop an acute onset of Obsessive Compulsive Disorder (OCD) and/or tic disorders, following an infection of Group A streptococcus, such as “Strep throat”. It is typically accompanied by additional symptoms also found in PANS.

Current PANDAS criteria are:
• Presence of OCD and/or tics, particularly multiple, complex or unusual tics
• Age Requirement (Symptoms of the disorder first become evident between 3 years of age and puberty)
• Acute onset and episodic (relapsing-remitting) course
• Association with Group A Streptococcal (GAS) infection
• Association with Neurological Abnormalities, including adventitious movements

II. Treating PANS and PANDAS


The 3 article series includes recommendations on a variety of possible therapies including:
• Antimicrobials and secondary prophylaxis
• Immunomodulating and anti-inflammatory therapies, including NSAID’s, steroids, IVIG and Plasmapheresis
• Management of symptoms through CBT and psychiatric medications

III. Additional Resources
• National Institute of Mental Health (NIMH): https://goo.gl/FSHNDu
• PANDAS Physicians Network (PPN): https://www.pandasppn.org/