Has your patient's behavior changed almost overnight?

Are they suddenly engaged in repetitive behaviors and experiencing chronic anxiety?

This might be sudden-onset obsessive compulsive disorder (OCD), more commonly known as Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcus (PANDAS).

The International OCD Foundation is here to help.



Resources

For more information about PANDAS/PANS: OCDinKids.org/PANDAS

To find a local licensed mental health practitioner who specializes in OCD, please visit:

OCDinKids.org/find-help

To find a local licensed medical practitioner who specializes in PANDAS/PANS, please visit: pandasppn.org/practitioners

For more information about anxiety/OCD in school: **anxietyintheclassroom.org**

If you are interested in learning about upcoming training opportunities for a variety of pediatric professionals, please email **training@iocdf.org**

References

- Wald, E. R., Eickhoff, J., Flood, G. E., Heinz, M. V., Liu, D., Agrawal, A., Morse, R. P., Raney, V. M., Veerapandiyan, A., & Madan, J. C. (2023). Estimate of the incidence of PANDAS and PANS in 3 primary care populations. Frontiers in pediatrics, 11, 1170379. https://doi.org/10.3389/fped.2023.1170379
- Murphy, M.L., & Pichichero, M.E. (2002). Prospective identification and treatment of children with pediatric autoimmune neuropsychiatric disorder associated with group A streptococcal infection (PANDAS). Archives of Pediatrics & Adolescent Medicine, 156(4), 356–361.

For more information about PANDAS/PANS assessment and evaluation, please refer to: Chang, K., Frankovich, J., Cooperstock, M., Cunningham, M.W., Latimer, M.E., Murphy, T.K., Pasternack, M., Thienemann, M., Williams, K., Walter, J., & Swedo, S.E. (2015). Clinical evaluation of youth with pediatric acute-onset neuropsychiatric syndrome (PANS): Recommendations from the 2013 PANS Consensus Conference. Journal of Child and Adolescent Psychopharmacology, 25(1), 3-13.



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What is PANDAS/PANS?

Information for medical providers about acute-onset OCD symptoms in children



What is PANDAS/PANS?

Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcus (PANDAS) is the sudden, rapid onset of obsessive-compulsive behavior, and/ or possible movement and behavioral abnormalities, following a Streptococcus pyogenes (Group A Strep) infection. The condition is hypothesized to be the result of autoimmune antibodies mistakenly attacking an area of the brain, the basal ganglia, rather than the intended infectious agent. This is a rare disorder and occurs in 1 out of 1,100 people.¹

Research has shown that other infections, in addition to Streptococcus pyogenes, can cause the sudden onset of obsessive-compulsive behaviors or restrictive eating. **Pediatric Acute-onset Neuropsychiatric Syndrome (PANS)** presents with a similar rapid onset of symptoms due to infectious agents such as mycoplasma, mononucleosis, Lyme disease, and the flu.

Obsessive compulsive disorder (OCD) is a mental health condition characterized by a cycle of obsessions, intrusive thoughts, or images that leave the patient with uncontrollable worry, anxiety, and doubt. Persons with OCD habitually engage in compulsions or rituals in an attempt to reduce anxiety related to obsessions.

Common obsessions may include:

- Fears of contamination or preoccupation with cleanliness
- Pathological doubt
- Unwanted thoughts and/or images of an aggressive, religious, or sexual nature
- The need for symmetry, order, and precision

Common compulsions may involve:

- Excessive checking
- · Excessive washing and/or cleaning
- Counting (e.g., doing things a certain number of times, counting items to certain numbers)
- Ordering or arranging things
- Mental compulsions (e.g., excessive praying, mental reviewing)
- Excessive reassurance seeking (e.g., often asking "Are you sure I'm going to be okay?")

In most youth with OCD, these symptoms have a gradual onset, developing over the course of several weeks or months. In contrast, OCD symptoms for patients with PANDAS/PANS may develop over the course of a few days, and quickly become severe.

In addition to OCD symptoms, other PANDAS/PANS specific symptoms may include:

- Severe separation anxiety
- · Anorexia or disordered eating
- Urinary frequency
- Tics and/or abnormal movements
- Acute handwriting difficulty
- Irritability, aggression, and/or severe oppositional behaviors

How do I diagnose PANDAS/PANS?

The most noticeable criterion is the abrupt, dramatic onset of OCD symptoms, as observed by clinicians or as reported by caregivers.

If symptom onset is sudden, test for active infections, especially strep, within three weeks of onset.²

- Assess for a history of sore throat, fever, exudative pharyngitis, cervical adenopathy (enlarged and tender lymph nodes in the neck), and enlarged or damaged tonsils.
- Test for strep via two-swab sample, as well as for atypical presentations that may result in a negative throat culture. Such presentations include abdominal pain and vomiting, vaginal or perianal redness, sinus or middle ear infection.
- If clinically indicated, additionally test for mycoplasma, mononucleosis, Lyme disease, and/or H1N1.

If the patient has acute-onset OCD symptoms associated with an infection, it may be PANDAS/PANS.

How do I treat PANDAS/PANS?

Treat all known infections. Specific attention should be given to children with a recent Group A Strep infection and abnormal movements to rule out Sydenham's chorea, a rare but potentially lifethreatening poststreptococcal autoimmune illness.

Partner with a licensed mental health professional as soon as possible. Effective and empirically validated therapies for OCD, such as a type of cognitive behavioral therapy (CBT) called exposure and response prevention (ERP), may significantly improve OCD symptoms when administered by a trained therapist.

Limited research suggests that in some patients with PANDAS/PANS, symptoms may resolve following successful treatment of an infection.²

Symptoms may return in future weeks or months, warranting additional surveillance for and treatment of infectious agents.

Test and treat family members as indicated to ensure the infection is cleared from the home. Anti-Inflammatories or corticosteroids may be beneficial for PANDAS/PANS patients.

Intravenous Immunoglobulin (IVIG) may be helpful for severe or life threatening cases, or as indicated for immune deficiency disorders. Partnering with a clinical immunologist with experience treating children with PANDAS/PANS is highly recommended in these instances.

