

PANS and PANDAS

What Every Parent Needs to Know

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What is PANS & PANDAS?

Pediatric Acute-onset Neuropsychiatric Syndrome (PANS) is a rare neuropsychiatric condition that affects children and young teens. The symptoms of PANS can be similar to those of autism, anxiety and obsessive compulsive disorder (OCD).[1] The distinguishing factor of PANS is that symptoms often appear suddenly. PANS can have both infectious and non-infectious triggers. Infectious triggers can include pathogens, such as viruses, bacteria and parasites, while non-infectious triggers can include things like heavy metal exposure and environmental toxins. Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcal Infection (PANDAS) is a subset of PANS and is diagnosed when PANS is caused by a strep infection.

Some professionals are transitioning to a new acronym for this condition: CPIE, which stands for Childhood Post-Infectious Encephalitis.

What Are the Symptoms of PANS/PANDAS?

PANS / PANDAS (P/P) is marked by the usually abrupt onset of the following symptoms:[2]

- Compulsive behaviors
- Anxiety, including age-inappropriate separation anxiety
- Restrictive food intake
- Emotional lability, irritability, aggression, oppositional behaviors
- Sensory amplification
- Behavioral and/or developmental regression
- Urinary changes (e.g., frequency, bed-wetting)
- Vocal and/or motor tics
- Academic regression, particularly in math and hand-writing skills
- Sleep disturbances

P/P is marked by a relapsing and remitting course. This means that symptoms may improve, only to recur. These recurrences are often called 'flares.' Most parents whose child was diagnosed with P/P report that there was a sudden and dramatic change in the child that seemed to happen suddenly.

Multiple diagnoses in a child, such as behavior issues, ODD, OCD, autism, anxiety and ADD/HD, should be a red flag both for parents and doctors.[3] It is highly recommended that these children have a PANS/PANDAS workup.

What Causes P/P?

There are several theories about the cause of P/P. It is primarily thought to be encephalitis (brain swelling) caused by a misdirected immune system response. This immune response affects the blood-brain barrier causing inflammation, which results in the symptoms outlined above. It is common for P/P patients to have a strong family history of autoimmune disorders.[4]

Strep is the most common cause of this disorder. It is common to see the onset of symptoms when a child has a loose tooth, or when a new tooth is erupting. Also, seasonal allergies often cause an onset of symptoms.

How Common is P/P?

Current research states that at least 1:200 children have P/P.[5] It is possible that this number is actually higher but the small number of doctors trained to recognize and test for P/P means many children go undiagnosed and untreated.

The average age of diagnosis is between 4 and 13 years old. While it typically occurs prior to puberty, cases of older teens have been identified.

How is P/P Diagnosed?

If you suspect P/P, it's important to find a doctor with experience. The workup begins with a thorough physical exam. Many clues can also be found during a history-taking and examination, including a history of frequent strep infections, rashes, vocal or motor tics, and abnormalities in pupillary response and reflexes. It's worth noting that strep can be the cause of the infection without the child ever experiencing classic strep throat symptoms, such as fever, sore throat or rash.[6]

The standard of care is to first rule out strep. This includes a rapid strep test and possibly a throat culture. Since strep is often found in places other than the throat, a rectal and/or genital culture may also be ordered.

Blood work is also required to identify strep antibodies. It's common for cultures and labs to give false negatives, so these should be repeated after a few weeks. Some doctors will also order a stool test to rule out strep in the intestine. Many doctors will do a blood test called the Cunningham Panel, which offers specific information about the autoimmune component of P/P.



If strep is ruled out as the pathogen, the doctor will check for other triggers, such as Mycoplasma, Epstein-Barr virus, Cytomegalovirus, Human Herpesvirus 6, Influenza, Coxsackie virus, Candida and Lyme disease.

If these pathogens are ruled out, then non-infectious triggers, such as heavy metals, mold and allergies, should also be ruled out.

Sometimes, children have multiple triggers. When this is the case, the doctor will make a plan to address them in a way that makes the most sense for that child.

If a child is diagnosed with P/P due to an infectious trigger, particularly strep, it's critical that everyone in the household be tested to prevent the infection from being passed between family members.

How is P/P Usually Treated?

The treatment for P/P depends on the cause. If it's a bacterial trigger, the standard approach is antibiotics. Viral triggers are addressed with anti-virals. It is common for steroids and anti-inflammatories to be used as well. For some children, particularly with PANDAS, tonsillectomy is appropriate.[7] There are additional medical treatments that may be helpful, including plasmapheresis and IVIG (intravenous immunoglobulin therapy).[8]

There are many natural approaches to P/P. It's important to make sure the child has a healthy foundation by ruling out nutrient deficiencies, mitochondrial dysfunction and intestinal dysbiosis. Addressing these issues will ensure the best possible outcome. Depending on the cause of the P/P, natural options include supplements, herbs and homeopathy.

What Can You Expect From Intervention?

When the right approach is taken, improvement can be swift. Often, it takes some time to calm the inflammation and see changes. The earlier a child receives intervention, the better the outcome.

Note that flares are an expected course with P/P and are likely to occur. Parents need a doctor to support them through the ups and downs.

Where Can You Get Additional Information?

For more detailed information on P/P, go to:

www.pandasnetwork.org

www.moleculeralabs.com

https://childmind.org/guide/parents-guide-to-pans-and-pandas/

If you have questions or are interested in a consultation, feel free to email me at DrSonia@DrSoniaMcGowin.com



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Dr. Sonia McGowin, DC is a Chiropractor, DAN! and MAPS-trained doctor, practicing in Jefferson City, Missouri. The focus of her practice is children with disabilities ranging from learning disabilities to autism. She uses a biomedical and nutritional approach to address their specific issues. Dr. McGowin is a graduate of Cleveland Chiropractic College in Kansas City and lives in Jefferson City with her husband, two children, and their English bulldog, Lola.

Before becoming a Chiropractor, she was the Deputy Director of Outreach Services for the Judevine Center for Autism (now called Easter Seals Midwest), working with families with autism across 92 counties of Missouri for 14 years. It was after attending a DAN! conference in 2001 when she realized that autism is medical and decided to become a DAN! doctor.

Dr. McGowin has spent her career working with children and adults with autism, but she's also a parent of a child with unique needs. As a toddler, her son displayed many troubling issues, such as a severe speech delay, self-injurious and aggressive behaviors; traditional medicine offered no hope or help for her family. Following biomedical intervention, her son is now a typical teenager and completely indistinguishable from his peers. After the experience with her son, she vowed that no families should feel alone in their quest to recover their child.

These experiences, along with her training as a DAN! and MAPS doctor, give Dr. McGowin a unique skillset to offer interventions for children with disabilities of any kind. She uses a variety of approaches, including lab testing, supplements, food allergy and sensitivity testing, essential oils, as well as the IonCleanse by AMD. She frequently speaks at conferences and summits, and has worked with patients from all over the US, other countries, and from all parts of her home state of Missouri.

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