



# PANDAS Syndrome

Pediatric autoimmune neuropsychiatric disorder or PANDAS is a complex disorder that consists of many different symptoms unique to each patient. A child may be diagnosed with PANDAS following a streptococcal (strep) infection or scarlet fever. Pandas refer to a group of mental health conditions in children that suddenly appear after a strep infection. Children diagnosed with obsessive-compulsive disorder (OCD), a tic disorder, or both after having strep or Scarlett fever likely have PANDAS.

Obsessive-compulsive disorder

Tic-related OCD

PANDAS

Chronic tic disorders



# Diagnosis



Because a diagnosis of PANDAS requires an appearance or worsening after a strep infection or Scarlet fever, children can receive an incorrect diagnosis. Due to this, it is important to provide the doctor with a complete medical history and notify them if a child's symptoms change after an infection.

PANDAS appears to be an autoimmune disorder. Researchers think that PANDAS may occur when the body attacks cells in the basal ganglia, a region of the brain responsible for many functions, including learning and movement.

Strep bacteria survive in the human host by hiding from the immune system for as long as possible.





# PANDAS

● —————

They hide themselves by putting molecules on their cell wall so that they look nearly identical to molecules found on the child's heart, joints, skin, and brain tissues. This hiding is called "molecular mimicry" and allows the strep bacteria to evade detection for a long time. Studies at the National Institute of Mental Health (NIMH) and elsewhere have shown that some cross-reactive antibodies target the brain—causing OCD, tics, and the other neuropsychiatric symptoms of PANDAS.

PANDAS, which can mimic other disorders requires a test for the strep bacteria or a history of the bacteria is necessary to confirm your child has PANDAS. If strep doesn't show up after a throat swab or antibody test, a check of other places strep tends to hide, like the child's bottom, genitals, or sinuses is recommended.





# Treatments

A blood test will indicate if the child had a recent strep infection even if they recovered.

The first treatment option for PANDAS is to treat the strep infection causing the symptoms with antibiotics if it is still present. Children with PANDAS-related obsessive-compulsive symptoms will benefit from standard behavioral therapies and medications. Tics respond to a variety of medications.

OCD symptoms are treated best with a combination of CBT and a selective serotonin reuptake inhibitor (SSRI) medication. Sometimes, a child can "outgrow" PANDAS if the strep infection is treated, but not always. If the child gets another strep infection, the PANDAS will almost certainly come back if it wasn't treated the first time.



