

# What's going ON With CAROLINE?

P.A.N.D.A.S. is Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcal Infections.

You may be wondering why I'm missing so much school, this page will help explain.

- I have an autoimmune disorder causing severe insomnia
- I appreciate your understanding while I'm healing



## To stay in school... I Need to Stay Healthy

- ✓ Please oversee my thorough hand washing.
- ✓ If someone is sick, please keep me at a distance from them when possible.



## P.A.N.D.A.S. Facts

PANDAS is an **autoimmune disorder**, in which certain infections cause a person to create antibodies which attack the brain.

The process is similar to what happens in Rheumatic Fever, except that the brain is attacked instead of the heart, causing encephalitis (inflammation of the brain), particularly in the **basal ganglia** region.

Damage to the basal ganglia can cause:

- Obsessive Compulsions and Tics
- ADHD symptoms (hyperactivity, inattention, fidgety)
- Separation anxiety
- Involuntary movements
- Mood changes (irritability / emotional lability)
- Sleep disturbance (night waking, insomnia)
- Urinary urgency or frequency
- Marked deterioration in handwriting and/or math skills
- Tactile/Sensory Defensiveness
- Age Regressive Behaviors

Streptococcal infection has been most studied; however, **any infection** can trigger this condition. Thus, a new name is often being used: **P.A.N.S. for Pediatric Autoimmune Neurological Syndrome.**

The main treatments involve anti-inflammatory agents to reduce symptoms and immune modulators & IVIG to promote health and potentially bring remission.

## How does it manifest in me?

After exposure to illness, my brain inflammation generally causes:

### OCD behaviors and tics

- ✓ Picking at lips and fingernails
- ✓ Insisting on things in a certain order
- ✓ Obsessing over cleanliness
- ✓ Coughing tic

### Increased inattentiveness

- ✓ Not as engaged with people
- ✓ Harder to keep on task

### Difficulty with fine motor skills

- ✓ Handwriting regression

### Irritability / Easily overwhelmed

- ✓ My head hurts & it shows.

## What My Doctor Says about Sleep...

**My Doctor is a Pediatric Neurologist, and a specialist in PANDAS. He says:**

- The basal ganglia control sleep / wake cycles -- during a "flare," I can be awake for up to 6 hours in the night.
- Getting enough sleep is critical for boosting my immune system and healing my brain.
- My IGG levels are very low, so I need to take extra measures to stay healthy.
- As much as I want to, I can't be woken for school after a sleepless night. My brain will not heal and lack of sleep compromises the immune system.

Thank you for learning about me... I hope to be feeling much better soon!

Interesting to Note... This autoimmune condition is an explanation for why parents often anecdotally report an onset of autistic-like symptoms following exposure to viruses from vaccines. [www.regardingcaroline.com](http://www.regardingcaroline.com) for more info.