

PANDAS Physicians Network

Other Treatment Options



I. Anti-Inflammatories:

If PANDAS/PANS symptoms continue beyond 2 weeks, oral nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen may be beneficial. The medications appear to be particularly useful for exacerbations (or “mini-flares”) which occur in the weeks following immunotherapy. Assuming that the PANS and PANDAS condition is the result of an immune system disorder, reducing inflammation would have a beneficial effect for patients. Follow dosing level provided by the manufacturer’s label. The cyclo-oxygenase inhibitor, celecoxib, is another NSAID that has been reported to be helpful. Mechanisms of action are unknown. All the NSAIDs carry risks of GI bleeding and other side effects, so they should be used with caution, following manufacturers’ guidelines for dosage and duration of therapy.

II. Antifungals:

Case reports to PPN include PANDAS and PANS children who have symptom exacerbations related to *Candida albicans* (yeast) infections. Even if the child takes probiotics, children on antibiotic therapy or prophylaxis are susceptible to candida overgrowth. Most physicians do not think to check for candida albicans in the oral cavity or other mucosal surfaces (vagina, rectum and urethra). Examining patients for yeast infections is imperative for all children whose PANS symptoms exacerbate during antibiotic treatment or prophylaxis, as well as for those with urinary frequency or other UTI-related symptoms. In young women, they are typically not yet at the age of gynecologic exams, and pediatricians rarely include yeast as a possible issue, even when urinary frequency or other urinary issues are present. If yeast is present, azole antifungals such as fluconazole (Diflucan) or nystatin may help alleviate the PANDAS exacerbation.

III. Antihistamines (H1 and H2 Blockers):

Antihistamines block effects of histamine and include H1 and H2 blockers. The H1 blockers include diphenhydramine, fexofenadine, loratadine, cetirizine and others; H2 blockers include cimetidine, ranitidine and nizatidine, among others. These drugs have a variety of anti-inflammatory and immunomodulatory activities. In addition to their immunologic properties, the H1 blockers (such as diphenhydramine or Benadryl) are “soporific” drugs which produce sleepiness; this side effect can be useful for PANDAS children with initial insomnia. However, paradoxical behavioral adverse events can occur with antihistamines, and instead of getting sleepy, the children become agitated, “wild” or out-of-control. These idiosyncratic reactions cannot be predicted, so initial doses of antihistamines should be administered with close parental supervision.

IV. Vitamin D

Indirect evidence supports optimization of Vitamin D levels among PANDAS and PANS children. Patients may be treated with vitamin D3 as needed to maintain serum 25-hydroxy vitamin D level above 30 ng/mL (75 nmol/L). This can usually be accomplished with a combination of a standard childhood multivitamin plus a vitamin D3 supplement of 1000 U daily for children 5 years of age or less or 2000 U daily for those 6 years or older.