

# PANDAS Physicians Network

## Steroid Therapy



For a patient with abrupt onset of PANS or PANDAS, corticosteroids may be beneficial. However, the child's clinical presentation must be considered, as steroids can cause activation, aggression and mania-like symptoms. If the child has these symptoms, steroids may not be advisable. Further, there are no controlled trials which demonstrate benefits for PANDAS. In part, this is related to historical reports of worsening of tics and problem behaviors during steroid administration. However, data from a controlled trial of Sydenham's chorea revealed that oral prednisone was effective in reducing symptom severity, albeit only transiently, as the chorea and behavioral symptoms recurred when the prednisone dose was tapered.

**Note that for patients who have Lyme disease, corticosteroids are contraindicated.**

### I. Brief Steroid Burst

The benefits of a brief course of oral corticosteroids can be dramatic, particularly if given within 1–3 days of symptom onset. Oral corticosteroid bursts may hasten recovery and minimize residual symptoms.

Consider the following protocol for a steroid burst:

Prednisone 1–2 mg/kg/day; given as single dose in morning or divided twice daily, maximum 60–120 mg daily, for 5 days

### II. Prolonged Steroid Treatment with Taper

Patients who improve with the corticosteroids but then relapse as the steroid effect wanes may benefit from an additional corticosteroid burst with or without a taper.

Consider the following protocol for a steroid taper:

Oral prednisone 2 mg/kg for 1 week and then taper to 1 mg/kg the second week, 0.5 mg/kg the third week and 0.5 mg/kg QOD for the final week.

The maximal initial starting dose is 60 mg per day. They are given in the morning and/or before 3pm to mitigate problems with sleeping. The beneficial effect of the steroids is not usually seen until the second week. As discussed above, there is a risk that behavioral symptoms may worsen during prednisone administration and would be a cause for discontinuation of the drug.

For many patients, steroids will produce sufficient improvements that no further immunomodulatory therapy is required. (Prophylactic antibiotics should be considered, as discussed below.) However, if the patient flares during the steroid taper, strongly consider adjunct therapy including IVIG and plasmapheresis. If the patient was successfully treated and has been weaned off of steroids, future exacerbations may respond to prompt treatment with a short course of prednisone (1 mg/kg/d for 5 days). Clinicians have reported good success with this approach, particularly during the H1N1 epidemic when many children with PANDAS had influenza-related exacerbations. Those patients were reported to respond to a treatment regimen that included 2 days of Tamiflu prior to (and during) the 5 days of steroids.