Vital AZ PANDAS and PANS Full Clinical Protocol

This document outlines the comprehensive clinical approach used by Vital AZ for the identification, diagnosis, treatment, and long term management of Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal infections and Pediatric Acute onset Neuropsychiatric Syndrome. This protocol is designed for complex cases and reflects real world clinical experience.

Clinical Presentation and Initial Suspicion

Children considered for evaluation typically present with abrupt or progressive onset neuropsychiatric and behavioral symptoms. These include motor or vocal tics, obsessive or compulsive behaviors, anxiety, emotional lability, rage episodes, sleep disturbance, regression in emotional maturity, restrictive eating patterns, separation anxiety, sensory sensitivities, and significant rigidity. Families often report that these children function well academically or athletically while home life becomes increasingly difficult.

Parental reports frequently include inability to sleep alone, daily emotional volatility, prolonged rage episodes lasting hours, extreme distress with minor frustrations, inability to tolerate routine changes, excessive reassurance seeking, repetitive behaviors, and obsessive cleanliness rituals. Symptoms often fluctuate and worsen with illness exposure within the household.

Diagnostic Framework

Diagnosis is based on integration of clinical history with objective laboratory data. No single test confirms or excludes PANDAS or PANS. Testing is used to identify immune triggers, quantify inflammatory burden, and guide targeted therapy.

Standard diagnostic evaluation includes antistreptolysin O titers and anti DNase B levels. ASO reflects more acute immune response to streptococcal exposure, while anti DNase B reflects chronic or prior exposure and may remain elevated for years in persistent immune activation.

For children unable to tolerate venipuncture, functional finger stick blood spot testing is utilized. This assesses markers of neuroinflammation and chronic streptococcal exposure. Testing is frequently combined with comprehensive stool analysis to assess dysbiosis, inflammation, and beta glucuronidase activity, as well as urine mycotoxin testing to evaluate environmental and dietary mold exposure.

If streptococcal markers are negative and symptom patterns remain consistent, a diagnosis of PANS is made. PANS reflects similar immune mediated neuroinflammation triggered by non streptococcal factors such as mold, viral infections, or other immune stressors.

Phase One Initial Immune Modulation

Initial treatment focuses on reducing immune activation and neuroinflammation. Antibiotic therapy is first line. Amoxicillin is typically initiated and often results in measurable improvement within two weeks. In children with predominant tic burden, azithromycin may be preferred due to enhanced central nervous system penetration.

Follow up at two weeks focuses on subtle but clinically meaningful improvements including smoother morning routines, reduced emotional volatility, improved sleep initiation, fewer behavioral escalations, and improved tolerance of transitions. Presence of these changes supports continuation of the selected antibiotic. Absence of improvement prompts reassessment and antibiotic adjustment.

Adjunctive Anti Inflammatory and Supportive Therapy

At approximately four weeks, adjunctive therapies are introduced to support nervous system regulation, immune modulation, and detoxification readiness. These include magnesium glycinate or magnesium threonate, targeted probiotics, cat’s claw for immune modulation, and N acetyl cysteine to support hepatic detoxification pathways.

Phase Two Ongoing Treatment and Detox Preparation

By two months, continued antibiotic therapy is maintained in responsive patients while readiness for detoxification is assessed. Daily bowel movements, adequate hydration, and stable energy levels are required prior to initiating binders.

Environmental mold exposure is extremely common in this population. In clinical practice, all children tested demonstrate presence of at least one mycotoxin, with averages ranging from seven to ten distinct exposures.

Phase Three Detoxification and Trigger Reduction

Detoxification is initiated carefully using binders such as activated charcoal. Charcoal is administered away from other supplements and medications and typically dosed in the evening. If significant symptom exacerbation occurs, dosing is reduced or alternative supports such as Saccharomyces boulardii or fulvic acid are utilized.

Constipation is proactively managed with magnesium citrate to ensure toxin elimination. Detoxification is adjusted dynamically to avoid excessive inflammatory response.

Expected Clinical Course

Most children demonstrate significant improvement by three to four months. At approximately four months, streptococcal burden is typically resolved, inflammation reduced, and symptom improvement ranges from fifty to seventy five percent. Antibiotics may be discontinued at this stage in stable patients while detoxification continues.

Full remission commonly occurs within four to six months, though some children require longer courses depending on immune burden and environmental exposures.

Flares and Long Term Management

Flares are expected during periods of immune stress including illness exposure. Short courses of nonsteroidal anti inflammatory medications may be used. In moderate to severe flares, prednisone dosed at two milligrams per kilogram daily for three to five days may be utilized to rapidly reduce neuroinflammation.

Low dose naltrexone at doses ranging from zero point seven five to one point five milligrams nightly may be introduced between months one and three for persistent inflammation or incomplete response.

Vital AZ Care Philosophy

PANDAS and PANS require patience, close follow up, and individualized care. Progress is rarely linear. The goal is to identify recovery potential and maintain function long term. With appropriate intervention, meaningful recovery is achievable.