



CYCLIC VOMITING CASE STUDY BY DR. RICHARD BOLES*

Lauren was evaluated at the age of 6 years with episodes of nausea, abdominal pain, swelling, hives, tiredness, headache, dizziness, and vertigo (spinning sensation). These episodes started in infancy, occurred monthly, lasted four to five days in duration, and were triggered by heat, over-exercise, viral infections, vaccinations, and fasting. Some episodes were more severe, including vomiting, blurred vision, ataxia (poor balance), muscle weakness, leg pain, tingling sensation, loss of vision, and increased sensitivity to light and sound, resulting in frequent hospitalizations. Low blood sugar and elevated acids and ketones were present during severe episodes. Between episodes, all above-mentioned symptoms were absent, although she was not able to regain the weight she lost during episodes. Between episodes, Lauren did suffer from migraine with ataxia, chronic pain in the abdomen and legs, chronic fatigue, GI issues (reflux, eosinophilic colitis), and possible seizures. Numerous allergies to food, additives, and dyes led to a diagnosis of mast cell activation syndrome (MCAS) provided by an immunologist, whereas testing revealed immune abnormalities including deficiencies in IgA antibodies and natural killer (NK) cells.

The complex symptoms, low weight, many prescription drugs taken, multiple hospitalizations, and extensive absent school days, coupled with the inability to determine an underlying diagnosis despite multiple specialist evaluations in a child who appeared well between episodes, led to allegations of Munchausen-by-proxy, and subsequent legal action. Unfortunately, the lack of emesis during most episodes obscured a diagnosis of cyclic vomiting syndrome (CVS) until evaluation by Dr. Boles. Mitochondrial dysfunction is nearly universal in people suffering from CVS, and this was confirmed in Lauren by significant anomalies by enzyme analysis with complex 1 and 2 deficiencies, with extreme elevated complex 4 activity. Mitochondrial-targeted therapy was started by supplementation with SpectrumNeeds® (33 active ingredients mostly targeted at mitochondrial dysfunction) and ubiquinol (a highly bioavailable form of coenzyme Q10, coQ10), with complete resolution of episodes, fatigue, pain, and all other clinical manifestations, except for lingering MCAS-related symptoms and heat intolerance (which induce migraine). She regained an appropriate weight, and the legal case was closed. One year later, Lauren remains well, episode-free, and back-in-school full time on these supplements, while on no medications except those targeting allergy/MCAS/immunity.

*RICHARD G. BOLES, M.D.
MEDICAL GENETICIST
CHIEF MEDICAL & SCIENTIFIC
OFFICER, NEURO NEEDS, LLC
DIRECTOR, NEUROABILITIES NEURO GERNOMICS