

Autism Spectrum/Developmental Delays:

Case Studies



Patient Information: Niranjan K., Male, 5 years old.

Issues: Niranjan's main issues were hyperactivity, extreme anxiety, avoidance of people and poor sleep patterns. Although going to a special education center, his progress was limited. In addition to these problems, Niranjan's immunity was weak and he suffered frequent cold, cough. When he had cold or cough, his other symptoms would worsen. He had been previously been given corticosteroid therapy for breathing issues.

Laboratory Findings: Laboratory evaluations showed Niranjan's adrenal health was poor; he had low morning cortisol and elevated night time cortisol. Niranjan's levels of dopamine, epinephrine and norepinephrine were low.

Treatment: All the issues that Niranjan's parents reported were connected and thus the challenge was to decide where to start. The doctor felt that improving immunity and eliminating the frequent cold and cough episodes was essential. Niranjan was given adrenal support and provided hormone restoration to improve his cortisol production. At the same time he was placed on anxiety-reducing vitamins and minerals.

Results: A few days into the treatment Niranjan's anxiety levels reduced, and he became noticeably more social. At the end of one month, the frequency of his cold and cough reduced. In the third, he had no cold or cough. With an improvement in social interactions, and increased curiosity, parents and therapists reported significant progress.

Patient Information: Dara.M., Female, 2 years and 8 months old.

Issues: A first glance at Dara and no one would suspect she had any developmental problems. She looked healthy and had no general health issues. During the period of observation her parents stated, and the observation confirmed, that Dara had a very poor response when her name was called. Most of the time she walked on her toes. She would run around and would not stop when asked to. Eye contact was quite poor. She would speak but out of context and her sentences lacked meaning.

Laboratory Findings: Nutrient extraction and absorption were a demonstrated problem in Dara's case. She had a previously diagnosed iron deficiency. This along with low levels of copper affected key enzyme pathways making the production of some neurotransmitter from her diet an ongoing challenge. A special test confirmed a problem in a co-factor called tetrahydrobiopterin. As a result of these issues, Dara's neurotransmitter metabolism was affected in terms of the actual availability of dopamine, among others.

Treatment: A combination of mineral supplements and enzyme co-factors based on the observed symptoms and laboratory findings were recommended. We informed the parents that if their daughter responded to the treatment, there would be a reduction in toe walking.

Results: At the end of four months, Dara had done well with toe-walking occurring occasionally. She became emotionally more engaged and her response to call was almost normal. Dara's language improved in terms of her ability to bring meaning to her words and sentences.

Patient Information: Mohammed K., Male, 7 years old.

Issues: Mohammed's main issues were extremely poor appetite, inability to chew food, near absence of fine motor skills, poor physical growth, lack of speech and severe anxiety.

Laboratory Findings: Comprehensive stool analysis revealed problems in several areas of gastrointestinal functional. Multiple bacterial infections and the presence of parasites coupled with low stomach acid levels. The beneficial bacteria were severely depleted. Food intake was either liquid or semi-liquid, thus nutrient availability was an issue. Protein malabsorption further contributed to the problem of neurotransmitter synthesis.

Results: The first phase of treatment consisted of getting rid of the gastrointestinal problems. The second stage targeted customized amino acid therapy to improve appetite and neurotransmitter function. Mohammed was given pediatric doses of natural hormones to improve muscular tone and function. While it would take more than half an hour previously to get Mohammed into and out of the parents' car while taking him to special education center, 45 days after treatment he would step out of the car without fuss. His interactions with others at the center improved. He gained weight and began chewing food when it was not too solid. At the end of three months Mohammed's parents reported that their son needed no prodding to go to the special education center and that he even started exercising under guidance.

Patient Information: D.I., Male, 4 years, 6 months old.

Issues: D.I.'s main issues were extreme hyperactivity, severe chronic constipation and the absence of speech (although he showed that understood some instructions). Often D.I. would cry during the night, and because he kept rubbing his stomach, parents suspected a problem in the GI tract. The mother mentioned that D.I. seemed normal until about 2 years of age. He had good eye contact and responded to his name. He showed no abnormal level of restlessness or hyperactivity.

Laboratory Findings: Comprehensive stool analysis showed high yeast/fungal overgrowth. Separate intestinal dysbiosis done through the examination of bacterial metabolism products in urine indicated high levels of D-arabinitol and trycarballylate too. There was also reduced activity of the beneficial bacteria. Pancreatic enzymes were low. The high presence of trycarballylate made the availability of magnesium an issue in D.I.'s case. A study of neurotransmitter byproducts as well as directly measured excretion values showed abnormal activity of dopamine and epinephrine. Histamine was elevated as well.

Treatment: We treated the yeast/fungal overgrowth with a combination of short-course prescription and long-term botanicals. Our focus was reducing hyperactivity. Since hyperactivity was dominant between 3 and 6pm, we changed the diet to include more complex carbohydrates during lunch while supplementing vitamins and amino acids to provide calming inhibitory stimulus.

Results: Within the first three weeks, D.I.'s parents reported visible improvement in both sleep quality and daytime hyperactivity. Miraculously their son started speaking a few words two months into the program. D.I.'s case was remarkable in another respect too. His receptive language function was not impaired and even though he did not utter a word, his brain was not only receiving language, it was interpreting, sorting and storing information. Once he started speaking, all the stored language flooded out! D.I. is currently in a standard school and does not require a shadow to be with him.