Pyrrole Disorder: a Possible Biochemical Cause of Bipolar, DMDD

Mood instability caused by pyrrole disorder is relatively unknown in the medical community.

DESCRIPTION

Pyrrole Disorder is an abnormality in biochemistry resulting in the overproduction of pyrrole molecules, normal by-products of hemoglobin synthesis and other processes in the body. Excess pyrroles have little or no function in the body and are effectively excreted in the urine; however, pyrroles have an affinity for zinc and may contribute to zinc deficiency by increasing its urinary loss.

When elevated in the urine, they represent a marker for functional deficiencies in Vitamin B-6 and zinc. A high incidence of Pyrrole Disorder is found in individuals with anxiety disorder, depression, ODD, schizophrenia, bipolar disorder and ADHD.

The decisive laboratory test is analysis for kryptopyrroles in urine. Biomedical treatment centers on restoring the body with necessary nutrients.

COMMON SYMPTOMS of PYRROLE DISORDER

- poor stress control
- high irritability
- short temper
- severe inner tension
- extreme mood swings
- joint pains
- white spots on fingernails
- severe depression
- poor growth
- severe anxiety
- spleen area pain (stitch in side)
- histrionic behavior
- delayed puberty
- morning nausea
- little or no dream recall
- stretch marks

SYMPTOMS

Common mood instability symptoms of pyrrole disorder include high irritability and temper, poor stress control, frequent infections, poor short-term memory, and sensitivity to light and sound. Physical signs include white spots on finger nails, a sweet or “fruity” breath, and poor wound healing. In teenagers symptoms may include depression, pessimism, severe mood swings, or a prior diagnosis of Bipolar Disorder. Often times these individuals withdraw socially and have a tendency to stay up late. People with pyrrole disorder may show signs of
nervousness, anxiety, and have a severe inner tension. They may have incidents of episodic anger. These symptoms may be due to their combined zinc and Vitamin B6 deficiencies. Most individuals with Pyrrole Disorder are easily agitated and react with a short fuse.

CHILDREN WITH DMDD, ADHD, ODD

Bipolar disorder is not a childhood condition, but this hasn’t stopped some practitioners from using the diagnosis on cases of children under the age of 18 with severe mood instability symptoms. To circumvent this problem, a new diagnosis was created called disruptive mood dysregulation disorder (DMDD). At Mensah Medical, it is our assertion that these children have an underlying pyrrole disorder, treatable without medication. Severe tantrums, bizarre shifts in mood/behavior, and poor response to stress are some of the symptoms. You should especially test for pyrrole disorder if your child has these symptoms and has a prior diagnosis of ADHD, a learning disorder, or oppositional defiant disorder (ODD).

DIAGNOSIS

Pyrrole Disorder is diagnosed by finding elevated kryptopyrroles in urine. Laboratory testing will indicate whether you have pyrrole disorder. Our physicians will look at your medical history, symptoms, and your pyroluria laboratory test results together to allow for an accurate diagnosis of pyrrole disorder. Often times, borderline cases are seen in test results and this does not always indicate pyrrole disorder in the individual.

Laboratory tests for kryptopyrroles in urine. Individuals with low-normal Kp levels of 10-20 mcg/dl are considered to
have Pyrrole Disorder, if clinical symptoms are present. Patients with Kp levels of 20 mcg/dl or greater are very likely to exhibit clinical symptoms. It is important to note that the chemical analysis for Kp is difficult due to the tendency for Kp to decompose if the sample is not kept frozen and away from the light. The correct interpretation of the Kp laboratory result is very dependent on proper collection technique and knowledge of the patient history.

Mensah Medical uses Direct Health Care Access II Laboratory for our pyroluria testing. They are the only laboratory in the U.S. that reports both an actual (uncalculated) and a calculated (corrected) kryptopyrrole result. The calculated result compensates for concentration changes in the urine specimen result, allowing for more accurate test results.

**TREATMENT**

Biomedical treatment restores the body with necessary nutrients. Pyrrole Disorder is corrected by supplementing individualized, therapeutic dosages of Vitamin B6, pyridoxine-5-phosphate (the active form of Vitamin B-6) and zinc, and other supportive nutrient elements including vitamin C, vitamin E, and evening primrose oil. Therapeutic dosages are carefully determined by laboratory testing as well as patient age and weight, and whether there are additional biochemical imbalances present in the individual tested.

**ADDITIONAL INFORMATION**

If no other chemical imbalances are present, individuals with mild or moderate symptoms of Pyrrole Disorder may see a response to treatment in two to four (2-4) weeks. Individuals with more severe symptoms usually require one to three (1-3) months before some improvement is seen, with greater improvement occurring gradually over three to 12 months.

Since Pyrrole Disorder is a marker for a genetic tendency of increased need for Vitamin B-6 and zinc, it is very likely that the symptoms of Pyrrole Disorder will reoccur if nutritional treatment is stopped. Furthermore, since stress, illness and injury all exacerbate zinc deficiency and Pyrrole Disorder, individuals respond to treatment more rapidly when these factors are absent, and may relapse in times of stress or illness.