

EnLyte and Reported Improvements in Sleep

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Clinical dietary management with medical prescriptive foods has emerged as an essential management tool for physicians and patients. Molecular genetic testing has made an entry into everyday clinical practice helping healthcare providers individualize treatment based not just on reducing symptoms with prescription medications but on knowing more about WHO is being treated.

50% of the general population have variant alleles for methylene tetrahydrofolate reductase (MTHFR). This enzyme is crucial to the synthesis of all neurotransmitters. In fact, 70% of patients with mood symptoms have either a heterozygous or homozygous substitution leaving them less able to efficiently convert folate (vitamin B9) and other B vitamins to their methylated, reduced form necessary for use in the production of neurotransmitters. While the benefit in management of depressive symptoms has been well documented, the effect of EnLyte® on sleep has not been explored.

In an effort to assess the degree to which fatigue and resultant emotional dysregulation might be improved, EnLyte® was added in an open-label fashion to the treatment regimen of 60 patients in an outpatient neuropsychiatry clinic who had tested positive for one or two C677T allele MTHFR single nucleotide substitutions. Pre and post-EnLyte® levels of fatigue were obtained per standard clinic protocol using the Fatigue Assessment Scale (FAS) and levels of emotional dysregulation (difficulties in frustration tolerance and impulse control) with the Mech Emotional Dysregulation Inventory (MEDI).

Patients took the EnLyte® in an open label manner for 4-weeks. Most patients reported their sleep was significantly improved. This was demonstrated on the Fatigue Assessment inventories completed by patients pre- and post-EnLyte® administration where patients reported improvements in sleep quality with a 22% reduction in fatigue and a 41% reduction in related emotional dysregulation (i.e., impaired frustration tolerance and impulse control.)

Limitations of this study include the confounding variables of co-occurring diagnoses; concomitant medications and a lack of objective polysomnographic sleep architecture data at baseline and post-EnLyte® management. Further studies are needed to better understand the benefits of EnLyte® management on crucial measures of total sleep time (TST), the percentage of total sleep time spent in N3 slow-wave sleep and in rapid eye movement (REM) sleep.