THE TUESDAY MINUTE

THIS WEEK'S TOPIC

GABA Support For Anxiety, Panic, Overwhelmed

"Biotics Research launched a new line of products called "NeuTropics™" to target the nervous system by enhancing neurotransmitter function in the brain."

It's common knowledge that we live in an over stimulated society. We joke about being over-caffeinated with our extra shot latte or 5-hour energy cocktails. Over stimulation is a real issue; and recognizing this trend, we need to have strategies in place that can restore inhibitory balance.

When we normally think of over stimulation, we think of anxiety, panic maybe insomnia. But neurologically, over stimulation also translates to muscles; and that can mean loss of muscle tone and even seizures.

Did you know that the goal of most prescription anti-anxiety, seizure and insomniac medications is to normalize the amino acid GABA as their primary target? GABA is short for gamma-aminobutyric acid and is the primary inhibitory neurotransmitter in the brain.

Neurotransmitters are chemical molecules that "ferry" nerve impulses across the synapse from one neuron to the next. Neurotransmitters are the communication molecules that turn

receptors "on and off" affecting various peripheral tissues and organs particularly muscle fibers.

Since GABA is inhibitory or "turns off" receptors, the brain becomes over excited when GABA is deficient and that can mean over stimulation "neurologically."

Low GABA levels may cause your patients to experience panic or anxiety, feelings of dread, being overwhelmed for no reason, guilt about decisions, a restless mind, difficult time turning their mind off when resting, disorganized attention, inner tension and excessive tendency to worry about things that don't come to pass. It's almost like having sufficient GABA allows us to have a sense of inner peace.

Environmentally, many factors sabotage the inhibitory effects of GABA. For example, the organochlorine group pesticides work by interfering with GABA receptors, making bugs actually convulse to death. Organochlorine type pesticides are accumulating in our foods and in our bodies as well.

Another toxin that interferes with GABA as well as other neurotransmitters is the heavy metal lead. Also, some medications can obstruct GABA particularly a category of antibiotics called quinolones which include common brands like Cipro and Floxin.

So how do we make GABA naturally? Well, it is synthesized from glutamate by the enzyme glutamic acid decarboxylase (GAD). What's interesting is that GAD is only present in neurons that use GABA as a neurotransmitter.

Many of you are aware that glutamate is an excitatory neurotransmitter. GAD can transform the excitatory glutamate into the inhibitory neurotransmitter GABA but it needs B6 as a cofactor. It does this by the removal of an acid group from glutamic acid to form GABA. This is one of the reasons why B6 is so valuable as an adjunct to control seizures. As you might expect, low levels of B6 will cause glutamate to increase and have been known to cause seizure activity.

A good friend of mine had a brain injured child. As a baby, regardless of the drugs given, the child had repeated seizures. I mean she was given poly-drug cocktails that were strong enough to stop a horse but nothing helped the seizures. However when she finally was given therapeutic levels of B6, her seizures miraculously stopped. GABA is available as a nutritional supplement; however, 98% of the GABA on the market is synthetically produced.

Why not just give GABA to cause inhibition? Unfortunately GABA does not cross the blood brain barrier in any appreciable amounts.

Dr. Court Vreeland, a Diplomate in chiropractic neurology, does a great job discussing "GABA Therapeutic Strategies" in his webinar which I reference below. He suggests that ONLY 4% of preformed GABA will cross the blood brain barrier. To get appropriate amounts, patients would have to take 10-15,000 mg a day. Fortunately, there are some natural solutions to this dilemma, one of which is to make sure adequate amounts of B6 are available as I mentioned.

Also we need adequate amounts of the amino acid taurine. But more effectively is a derivative of GABA called beta-phenyl-gamma-aminobutyric acid or phenibut for short.

Because phenibut has an extra phenyl ring, it can cross the blood brain barrier and exert its inhibitory effects. Doses in the range of 250-1,500 mg have been effective in the reduction of anxiety, seizures, insomnia and some cases of neuropathy.

Biotics Research launched a new line of products called "NeuTropics™" to target the nervous system by enhancing neurotransmitter function in the brain. Biotics' new GABA enhancing product PheniTropic™ is a plant based (non-synthetic) product yielding 300 mg of phenibut per capsule.

As with many botanicals from India, China and Africa, solvent residues are becoming a greater concern. Toxic chemicals are often used to extract plant compounds. Technically, chemical solvents are removed but they often leave a residue. Biotics screens for solvent residues, a procedure that is not required by law. Using botanical products from Biotics Research completely eliminates that concern.

Share details like this with your patients so they know why you recommend supplements that are pharmaceutical grade. PheniTropic™ is a welcome addition to our natural therapy inventory.

In an over stimulated society and with so many GABA focused drugs on the market, it's nice to have a plant based alternative.

Thanks for reading this week's edition of the Tuesday Minute. I'll see you next Tuesday.