

Improving Depression Outcomes

Data on depression treatment studies need to be screened for viewing when a literature search is done. I believe that any study that is funded with money from drug companies needs to be excluded. The best source for data appears to be University studies where no drug company money was involved. I performed a meta analysis of over 20 university studies involving approximately 6,000 patients the following is true:

1. The placebo effect in depression treatment is huge with approximately 30% to 45% of patients taking placebo achieving significant relief of symptoms.
2. In all studies reviewed only 7% to 12% of patients achieved relief better than placebo taking a variety of reuptake inhibitors in the various studies.
3. With treatment of the elderly (65 years of age and older) reuptake inhibitors revealed results that were no better than placebo. Make no mistake there is no benefit in giving people 65 years of age and older reuptake inhibitors.

Long term use of reuptake inhibitors is associated with tachyphaxis (where the drugs quit working). In virtually all cases tachyphaxis is caused by reuptake inhibitors depleting neurotransmitters to the point that the drug will not work as evidenced by the fact that starting level 1 NeuroReplete dosing will restore any benefits that may have been observed with the drug.

Indications for amino acid treatment of depression primarily involve two considerations. First, all patients started on or taking reuptake inhibitors need to take level 1 amino acid dosing to prevent depletion of neurotransmitters by the reuptake inhibitor. The second consideration is using amino acids as a treatment.

Where amino acids really excel is in the treatment of long term depression that has failed to respond to treatment attempts in the past. The following is the recommended approach for treatment of depression:

1. Initial visit, start NeuroReplete 4 pills in the AM and 4 PM with CysReplete 2 pills 3 times a day (first dose at noon).
2. One week later at the second visit, if symptoms are under control continue the initial dose then see the patient back in clinic in one month. If symptoms are not under control increase to 4 NeuroReplete in the AM and noon with 4 RepleteExtra at 4 PM (level 2 dosing) and continue CysReplete 2 pills 3 times a day with the first dose at noon. Then see the patient back in clinic in one week.
3. On the 3rd visit, 2 weeks after the initial visit, if symptoms are under control continues the initial dose then sees the patient back in clinic in one month. If symptoms are not under control increase to 4 NeuroReplete in the AM and noon with 4 RepleteExtra at 4 PM and 7 PM (level 3 dosing), continue CysReplete 2 pills 3 times a day with the first dose at noon. Then see the patient back in clinic in one week.
4. At the 4th visit, 3 weeks after the initial visit, if symptoms are under control continues the initial dose then sees the patient back in clinic in one month. If symptoms are not under control continue level 3 dosing (4 NeuroReplete in the AM and noon with 4 RepleteExtra at 4 PM and 7 PM with the CysReplete 2 pills 3 times a day) and obtain a urinary neurotransmitter test. When the test results and recommendations as reported back follow the recommendations until the patient's symptoms are under control or the serotonin AND dopamine is in the **phase 3 therapeutic range**.

Using this approach there have been no reported treatment failures in treating depression since 2005. It is important to follow through with testing and get both the serotonin and dopamine in the **phase 3 therapeutic range**. Once in the **phase 3 therapeutic range** 98% of patients with depression will have achieved relief of symptoms. The remaining 2% that do not achieve relief of symptoms are suffering from

“depressive bipolar disorder” (provided you have done a proper work up at the first visit and the patient is no hypothyroid or anemic). In the long term patient with depressive bipolar disorder the diagnosis under DSM IV standards may be hard to make. For example, the patient with depressive bipolar illness may have last cycled into hypomania 4 years ago for 2 weeks and nobody noticed.

Once the amino acid dosing is adjusted so that serotonin and dopamine are both in the **phase 3 therapeutic range** and no relief of symptoms are seen recommended treatment is to continue the amino acids then start one of the following, Lithium carbonate 300 mg twice a day or Depakote 500 mg twice a day or Lamictil 50 mg per day. In one week after starting one of the previous 3 drugs mentioned virtually all patients will achieve relief of symptoms. In the past 5 years we have seen 3 patients who did not respond to properly adjusted amino acids along with the starting dose of the drug. In those 3 cases the drug dosing was adjusted as it normally would be with a bipolar patient and the patient achieved relief of symptoms. In adjusting the drug I feel that Lithium carbonate and Depakote are superior to Lamictil since blood serum levels can be used to objectively guide dosing adjustments of these two drugs.

In treatment of depression this approach excels due to high number of patients responding and the ability to sort out patients with depressive bipolar disorder who is cycling primarily on the depression side of things. In working through this protocol with your patients there should be no reason that the patient will need to stop the amino acids permanently if managed properly. If you do have a patient who is having problems and you feel the patient has to stop the amino acids permanently give us a call at 877-626-2220 (tech support) and let us help come up with a strategy to keep the patient on track to relief of symptoms.

Depression is caused by neurotransmitter levels that are not high enough in the brain. Prescription drugs do nothing to increase the total number of neurotransmitter molecules in the brain, they work by moving neurotransmitters from one place to another and in the process set up condition that deplete the total number of neurotransmitter molecules in the brain. The only way to increase neurotransmitter levels in the brain is through administration of properly balanced amino acid precursors. Notice I said, “Properly balanced”. Using only 5-HTP or tryptophan or improperly balanced 5-HTP or tryptophan depletes dopamine. Using of only tyrosine or L-dopa or improperly balanced tyrosine or L-dopa depletes serotonin. If these precursors of serotonin and dopamine are not properly balanced one of the systems will be depleted. When depletion of one system is great enough the other system will not function either no matter how high you run its levels up.

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