

Research-Based Direction for the Use of Amino-Acid Therapy in the Treatment of Addicts with Borderline Personality Disorder

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I. Introduction

In our programs and practices, we have all seen the chronically relapsing addict, who did not respond sufficiently to neurotransmitter support. Many of these patients have rapidly switching moods and perceptions, a history of anger and violence (often against themselves), unstable relationships, many different compulsive or addictive behaviors, and a history of trauma. These are the clients who often abruptly terminate treatment, for no understandable causes. Such patients can leave therapists feeling exhausted, off-balance, rejected and incompetent. In this article, I wish to discuss clients with Borderline Personality Disorder, provide tools for identifying and diagnosing them, and offer natural biochemical treatment strategies and limitations.

II. What is a Personality Disorder?

A personality disorder is “an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual’s culture. It is inflexible and pervasive across a broad range or personal and social situations, is stable and of long duration. Its onset can be traced back to at least adolescence or early adulthood, and it leads to clinically significant distress or impairment in social, occupational or other important areas of function. This pattern is manifested in 2 or more of the following areas:

1. Cognition (ways of perceiving and interpreting self, other people and events)
2. Affectivity (range, intensity, lability and appropriateness of emotional response)
3. Interpersonal Functioning
4. Impulse Control”¹

In other words, a personality disorder is a stable way of being in the world, a self or personality structure that was created within the first 5 years of life, usually as a result of the confluence of profound environmental deficits (often trauma and neglect) and genetic vulnerabilities. People do not choose to have a personality disorder; however, it shapes the way they think, feel, relate to themselves and others, and behave. Most personality disorders are due to attachment failure or deficits, and shape their own adult attachment experiences.

Contemporary neuroscience is discovering how early attachment experiences and trauma actually affect and shape brain structures, and create enduring neuronal pathways. In turn, these pathways create automatic responses which can be changed, but only with focused attention, practice, and new interpersonal experiences, such as those created in long-term therapy.

In the DSM IV (Diagnostic and Statistical Manual), a distinction is made between Axis 1 and Axis 2 disorders. Axis 1 disorders are those mood and behavior disorders that are often considered to have a biochemical etiology and treatment. Axis 1 problems include all the major and minor mental disorders, developmental disorders and learning disabilities, such as:

Anxiety Disorders (e.g. panic disorder, social anxiety disorder, post traumatic stress disorder)

Mood Disorders (e.g. major depression, bipolar disorder)

Eating Disorders (e.g. anorexia nervosa, bulimia nervosa)

Psychotic Disorders

Dissociative Disorders

Substance Use Disorders

Axis 2 disorders include Personality Disorders and Mental Retardation.

III. What is Borderline Personality Disorder (BPD)?

BPD is strongly represented in addicted populations. People with BPD have severe emotional and impulse dysregulation, which leads to intensely painful shame, abandonment terror, mood swings, self-destructive behaviors and anger. These feelings are so uncomfortable that people are driven to self-medicate with mood regulating behaviors, such as substance abuse, process addictions and self-injurious behaviors like as cutting, eating disorders and suicide.

According to the DSM IV-TR, cited above, people who are diagnosed with borderline personality disorder have at least five of the following symptoms. They may:¹

- Engage in frantic efforts to avoid real or imagined abandonment.
- Have a pattern of difficult relationships, caused by alternating between extremes of intense admiration and hatred of others.
- Have an unstable self-image, or be unsure of his or her own identity.
- Act impulsively in ways that are self-damaging, such as extravagant spending, frequent and unprotected sex with many partners, substance abuse, binge eating, or reckless driving.
- Have recurring suicidal thoughts, make repeated suicide attempts, or cause self-injury through mutilation, such as cutting or burning himself or herself.
- Have frequent emotional overreactions or intense mood swings, including feeling depressed, irritable, or anxious. These mood swings usually only last a few hours at a time; in rare cases, they may last a day or two.
- Have long-term feelings of emptiness.
- Have inappropriate, fierce anger, or problems controlling anger. The person may often display temper tantrums, or get involved in physical fights.

- Have temporary episodes of feeling suspicious of others without reason (paranoia), or of losing a sense of reality.

While these symptoms may not be apparent upon first meeting a client with BPD, a careful history will reveal many of these longstanding patterns. The diagnosis should be suspected, and therefore ruled in or out, in clients who have abruptly dropped out of treatment, or terminated therapeutic relationships without good reason.

BPD should be considered in those clients who have initiated litigation repeatedly, those who keep changing sponsors, and those who just can't stay clean and sober, no matter what treatment approach is used, and no matter how many biochemical interventions (including amino acids) are tried. How are we to understand this, and how can we, as biochemically sophisticated providers, create an effective, systematic treatment plan for this very challenging population?

IV. Understanding Deep Brain Structures of Clients with BPD

Ongoing research into BPD has revealed that many brain structures and neurotransmitter systems are affected. Such target systems are different from those in people with other personality disorders, and from normal controls. Louis Cozolino,² in his book *The Neuroscience of Human Relations: Attachment and the Developing Social Brain*, describes the complexity of neurodevelopmental dysfunction in the borderline brain. These complex interrelationships make any attempts at biochemical intervention tricky at best, and ineffective at worst.

We need to understand that neurotransmitters are simply the messengers. If they have only one freeway to drive on, that is the road they will take, until more freeways are created, and the person/brain has more options. With people who have PTSD and/or a personality disorder, the brain's highway system is simplified and limited, especially in the areas that regulate arousal and social engagement. Rather than explore the array of complexity of the BPD brain's dysfunction, I will concentrate on the limbic system and neurotransmitters.

The amygdala is the part of the limbic system which searches for potential dangers, and creates reactions to signs of perceived danger. This part of the brain has a hard time forgetting past injury, especially bonding failures of early childhood. When it is activated, the person moves into a state of sympathetic arousal, where access is blocked to the reality testing and problem solving skills of the prefrontal cortex. Such a state leads to automatic and often out of control reactions.

In BPD, the brain is primed to look for and react to abandonment cues, however small, with the stress response.³ Research indicates that the release of norepinephrine during the stress response increases amygdala activation, further blocking access to the potentially calming and modulating prefrontal cortex and hippocampus.⁴ Therefore, the person with BPD frequently lives in a state of hypervigilance and hyperarousal.

V. Possible Treatment Strategies:

It is preferable to feed the brain before “tweaking” it. In this context therefore, we would support the use of indicated neurotransmitter precursor amino acids, before trying psychotropic drugs. Medication research is inconclusive, so some researchers are recommending treatment of different symptom clusters, rather than the disorder itself.⁵ This strategy lends itself to our approach.

An initial biochemical treatment strategy would be to assess and support adrenal function, using saliva testing, glandulars, nutrients and hydrocortisone or substitutes, as indicated. Norepinephrine release needs to be attenuated. This can be accomplished using L-Theanine^{6,7} and Sam-E. Low serotonin synthesis and diminished serotonin regulation in the prefrontal cortex is also evident in BPD.^{8,9,10} Experimenting with serotonin precursors, such as 5HTP or L-Tryptophan, would be called for here, dosed throughout the day, and not just at night.

It is interesting to note that the endorphin system has a role in attachment, bonding and distance/closeness regulation. Endorphin levels rise, fall and rise again in both infant and mother as they draw near one another, separate and reunite. Therefore, Cozolino¹¹ postulates that “the endorphin system and its role in the modulation of attachment and proximity may be central to borderline pathology, and account for the lack of treatment success with antidepressant medication, which target serotonergic and dopaminergic neurotransmitter systems.”

Endogenous opioids are implicated in severe cases of self-harm and suicide. Cozolino further postulates that in the borderline brain, the endogenous opioid system may not become activated under normal circumstances; therefore, self-harm may be a way to move beyond a higher threshold for endorphin release. DPA,(D-Phenylalanine), dosed throughout the day, may be useful to reduce self-harmful behaviors, and increase the possibility of more secure attachments.¹²

Seizure medications are used to treat intermittent explosive disorder in children.¹³ Depakote and Divalproex Sodium have been reported as useful for people with BPD.^{14, 15, 16} This research, along with potentially high scores in the GABA section of an assessment tool that we use, called the Amino Acid Therapy Chart¹⁷, would suggest the use of GABA-related amino acids, including GABA, Taurine, Glycine, to promote relaxation and decrease explosiveness.

VI. Conclusion:

My experience in treating recovering addicts who have BPD is that the therapeutic process is slow, but rewarding. I use the Amino Acid Therapy Chart initially, to create an amino acid program that is tailored to the individual (even though all the scores are usually high, initially). I then teach my clients to use the chart themselves, to direct the use of amino acids for symptoms as they appear.

Amino acids do not completely eliminate symptoms, as they might in a non-BPD addict. However, these nutrients are used as biochemical support, while the client is going through the arduous treatment process. When used religiously, amino acids may prevent or lessen the use of addictive substances and self-harm behaviors, as emotion regulation tools.

When treating the borderline addict, it is vital to remember that addiction is an illness with three components: biochemical, psychological and social/spiritual. All three components need to be addressed simultaneously, to achieve the most successful recovery experience. Just like trying to sit on a three-legged stool that has only one or two functional legs, trying to recover from an addiction, by addressing only one or two of the above components, is most likely doomed to failure.

Therefore, for the borderline addict, I recommend a treatment approach that follows traditional chemical dependency treatment methods, combined with biochemical support, long-term trauma sensitive psychodynamic psychotherapy with a therapist specializing in addiction treatment, emotion regulation skills training, such as is taught in *Dialectical Behavioral Therapy*, and the training of family members in the most effective responses (see the book Stop Walking on Eggshells).¹⁸ This multi-faceted treatment approach provides the most comprehensive strategy, to help a recovering addiction with Borderline Personality Disorder find long lasting healing.

Footnotes:

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17. Ross, Julia MA; Recovery Systems, Mill Valley, C
18. Kreger, Randi & Mason, Paul T., (1998). Stop Walking on Eggshells: Taking Your Life Back When Someone You Care about Has Borderline Personality Disorder. New Harbinger Pubns Inc.