CASE REPORT

Resolution of Refractory Bipolar Disorder With Psychotic Features and Suicidality Through Lifestyle Interventions: A Case Report

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ABSTRACT

Background • This case illustrates the relationship between gut, hormonal, and brain function in that dietary change, mindfulness interventions, and detoxification led to resolution of disabling luteally exacerbated psychiatric symptoms.

Summary • A 45-y-old, married, Caucasian female with a history of diagnosed bipolar disorder with psychotic features, premenstrual dysphoric disorder, panic disorder, and repeated occurrence of suicide attempts and self-mutilating behavior presented for outpatient management. She reported limited gains through conventional treatment consisting of medication. The patient was prescribed a dietary, detox, and meditation regimen for 1 mo, after which supplementation was added to support detoxification, digestion, hormonal balance, and nervous system structure and function. Additional lifestyle management therapeutics included daily meditation, dry-skin brushing, and coffee enemas.

Conclusion • This case exemplifies dramatic clinical remission after cessation of medication treatment and engagement of lifestyle interventions, which include dietary change, meditation, and detoxification. When medication demonstrates limited results, tapering combined with dietary interventions as the first-line therapy should be considered. (*Adv Mind Body Med.* 2017;31(2):4-11.)

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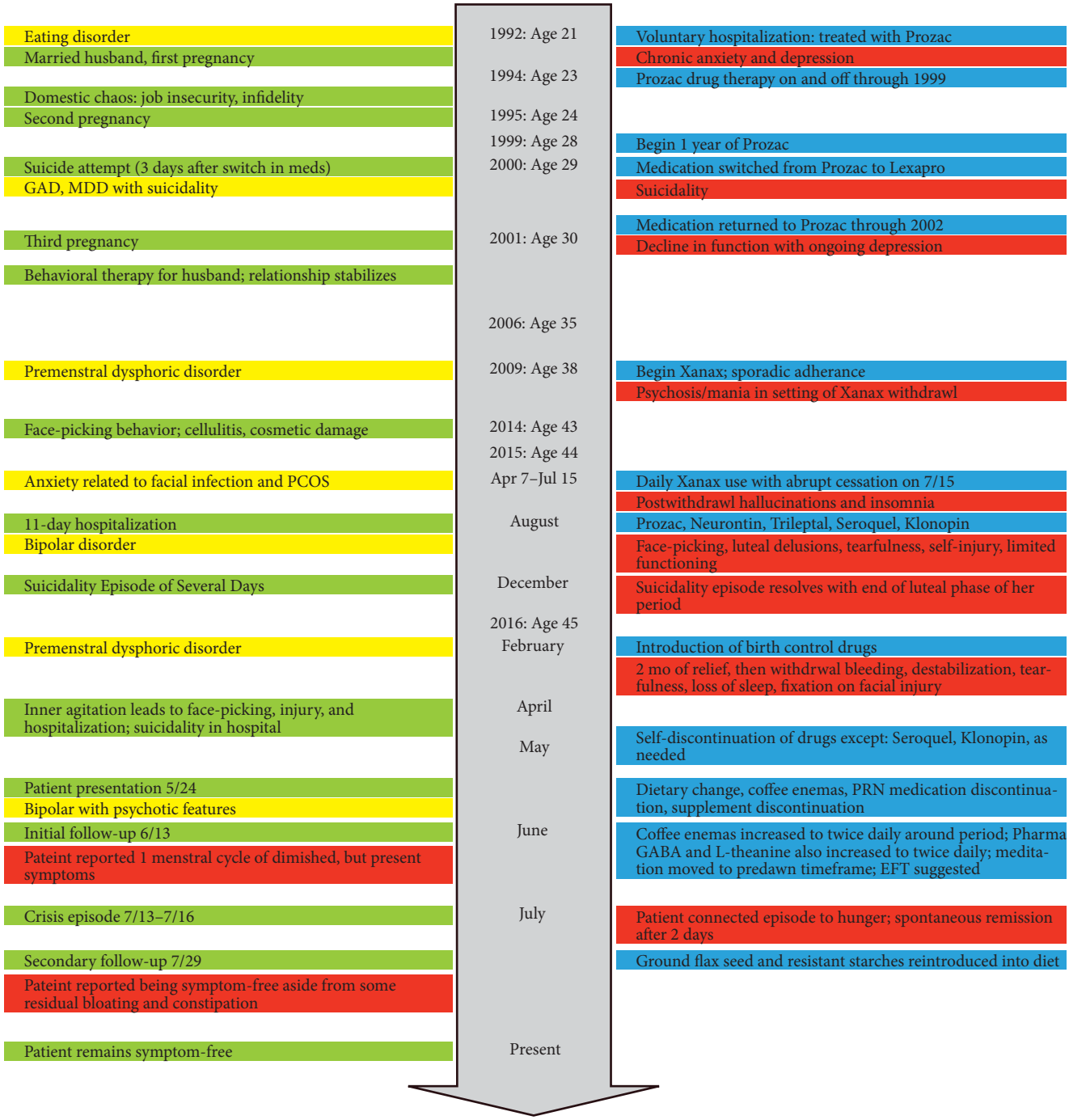
This is a case of dramatic clinical remission after cessation of medication treatment and engagement of lifestyle interventions. Standard medications failed to provide the desired outcomes for this patient, and her case represents a promising alternative therapeutic path for other patients who experience limited gains from medication. Tapering combined with dietary interventions as a first-line therapy should be considered for these patients. This case may also serve to inform practitioners counseling patients who prefer to try a nonpharmaceutical approach as the first-line therapy before initiating medication.

With a presenting diagnosis of bipolar disorder (BD), this patient's case reflects a common clinical trajectory of shifting and layering psychiatric diagnoses and polypharmacy. BD is the sixth-leading cause of disability today according to the World Health Organization. Standard of care in psychiatry allows for the comorbidity of multiple diagnoses including premenstrual dysphoric disorder (PMDD), BD, and panic disorder (PD) addressed with polypharmaceutical interventions for chronic management. Approximately 23 patients will be diagnosed with BD for every one patient treated with an antidepressant,[1] suggesting the possibility that iatrogenic contributions toward chronic and disabling illness are an increasing factor in modern psychiatric outcomes. Once a rare disorder, BD is now said to affect 1 in every 40 Americans. Current outcomes related to gold standard practice are concerning with researchers stating,

> In the era prior to pharmacotherapy, poor outcome in mania was considered a relatively rare occurrence …however, modern outcome studies have found that a majority of bipolar patients evidence high rates of functional impairment.[2]

This case illustrates the relationship between gut, hormonal, and brain function in that dietary change, mindfulness interventions, and detoxification led to resolution of luteally exacerbated psychiatric symptoms.

Timeline.



Abbreviations: GAD, generalized anxiety disorder; MDD, major depressive disorder; PCOS, polycystic ovary syndrome; PRN, pro re nata; EFT, emotional freedom technique.

Table 1. Physical Exam and Medications

Physical Exam	
Height	69 inches (175.26 cm)
Weight	170 pounds (77.27 kg)
Age of first menses	12 y
Lifetime pregnancies	4
Dates of births (vaginal)	1992, 1995, 2001
Diagnosis of polycystic ovary syndrome	2015
Medication	
Seroquel	50 mg 4 ×/d, as needed
Klonopin	0.5 to 1 mg/d, as needed

Table 2. Supplements at Presentation

Supplement	Dose
Green Acres fermented butter/cod liver oil	1.23 mL/d
Vitamin C	2000 to 3000 mg/d
Prescript Assist Pro/prebiotic	2 ×/d
Zinc	50 mg/d
Vitamin A	25 000 IU/d
α-Lipoic acid	400 mg/d
L-5-methyltetrahydrofolate	5 mg/d
Evening primrose oil	2000 mg/d
Organic flaxseed oil	3000 mg/d
Astaxanthin	10 mg/d
Hyaluronic acid	200 mg/d
Tumeric root extract	2000 mg/d
Magnesium	1000 mg (spread throughout day)

PATIENT INFORMATION

This is a case of a 45-year-old, married, Caucasian female with a history of diagnosed BD with psychotic features, PMDD, PD, and repeated suicide attempts and self-mutilating behavior who presented for outpatient management with report of limited gains through conventional treatment with medication. The patient was referred by her psychotherapist to the author as a "last resort" given that the treatment consideration at that point was for an intensive outpatient program or a residential treatment center. The results of her physical exam are included in Table 1, whereas a list of the supplements she had been taking in addition to her medication are listed in Table 2.

Social and Family History

The patient was born and raised in Oklahoma, the second of 4 children. She was induced, birthed vaginally, and breastfed. Her father suffered from obsessive-compulsive disorder and depression, whereas her mother suffered from depression and anxiety. She describes a very chaotic household centered on a family preoccupied with appearances and living largely beyond their means. She did not report any instances of abuse or trauma as she was growing up. She performed well in school and attended college, where she studied English and met her husband.

She birthed naturally in 1992, 1995, and 2001. During her second pregnancy, she learned of her husband's extramarital affair in the setting of domestic chaos (moving, mouse infestation, and husband's job loss). Eventually, her husband went to behavioral rehabilitation for 90 days and they have enjoyed a strong relationship for 10 years since, although she endorses chronic low self-worth and struggles with feelings of resentment. The patient reported no history of substance abuse.

Psychiatric History

After a voluntary hospitalization for eating-disordered (restrictive) behavior in college, she was treated for 1 year with Prozac. Several years later, in the setting of multiple life stressors, including marital infidelity, she was switched from Prozac to Lexapro. The medications were not cross-tapered—Lexapro was started immediately after stopping Prozac—which led to a suicide attempt 3 days after initiation (no previous history of suicidality) and initiated a switch back to Prozac for the period of 2000 to 2002. She took Xanax sporadically from 2009 onward.

Two years prior to presentation, she began engaging in face picking, which resulted in cellulitis and cosmetic damage to her face. Daily use of Xanax was prescribed in April of 2015 for anxiety related to her facial infection, which she stopped abruptly after 4 months, resulting in hallucinations and severe insomnia. Despite the obvious withdrawal syndrome symptomatology, she was diagnosed with BD during an 11-day hospitalization in August of 2015 and started on Prozac, Neurontin, Trileptal, Seroquel, and, as needed, Klonopin and Vistaryl. In December of that year, she became suicidal for several days during the luteal phase of her cycle, until the start of her menstruation.

In February of 2016, she was diagnosed with PMDD and started on birth control, which helped for 2 months and then resulted in withdrawal bleeding destabilization with tearfulness, loss of sleep, and fixation on her facial injury. At this time, she also underwent a cosmetic procedure to repair her facial injuries. As her period approached in April, she experienced inner agitation leading her to "dig for stitches" in her face related to the cosmetic procedure. This resulted in further injury to her face. She was hospitalized and attempted suicide in the hospital. With the onset of menstruation, she felt some relief.

Immediately prior to her presentation to the author on May 24, 2016, she had been struggling with daily instability.

She had self-discontinued medications shortly after her most recent hospitalization, apart from using Seroquel and Klonopin as needed for episodes lasting 4 to 6 hours and characterized by irrational preoccupation with her facial wound appearance, hopelessness, impulsivity, suicidality, and agitation. This occurred approximately 2 weeks prior to presenting for consultation with the author.

Additional complaints upon presentation included constipation, course hair, poor wound healing, and orthostasis. She noted that after she ate bread and dairy, she experienced significant psychiatric effects and was more likely to have intense episodes.

Mental Status Examination

The patient presented with her husband. She was casually dressed with blond hair and her interactions were friendly and appropriate. She had no gait disturbance and was observed to be without psychomotor retardation or agitation. Her eye contact was good and her speech sounded normal. Her mood was characterized as "flat." Her affect was reactive and full. Her thought process was logical and goal directed. She did not reveal suicidal, homicidal, or persecutory ideation, auditory or visual hallucinations, or ruminations and preoccupations. She displayed good insight and judgement, and she was alert and oriented to person, place, and time.

DIAGNOSTIC ASSESSMENT

DSM-IV Impression

Axis I: The patient was determined to have a mood disorder secondary to her general medical condition, which includes hypothyroidism and polycystic ovary syndrome (PCOS), and PMDD. The author ruled out PD and BD with psychotic features.

Axis II: Evaluation of axis II was deferred for continued observation.

Axis III: Medical conditions affecting the patient's current psychiatric state include hypothyroidism, PCOS, and a history of cellulitis.

Axis IV: Stressors in the patient's life include recent health management issues and marital repair.

Axis V: The patient's global assessment of functioning at the time of presentation was determined to be a score of 70, characterizing some mild symptoms or some difficulty in social or occupational functioning, but generally able to function adequately with meaningful interpersonal relationships.

Laboratory Testing

A set of laboratory tests were ordered. Results of note are listed in Table 3. All other ordered lab results were within normal/functional limits including comprehensive metabolic panel, complete blood count, B_{12}, homocysteine, thyroid peroxidase antibody, thyroglobulin antibodies, free T_3, free T_4, remainder of heavy metal panel, B_1, B_6, red blood cell magnesium, red blood cell zinc, celiac panel, and free testosterone. These were obtained at Manhattan Labs (New York, NY, USA).

Table 3. Laboratory Results of Note

Laboratory Test	Result	Reference Range
Serum arsenic	25 mcg/L	0-12 mcg/L
Cardio CRP	1.8 mg/L	0-3 mg/L
DHEA-s	322.8 mcg/dL	32 to 240 mcg/dL for a female aged 40-49 y
ANA	+ 1:80; Homogenous pattern	≤1:40
TSH	2.34	0.5 to 5.0

Abbreviations: CRP, c-reactive protein; DHEAS, dehydroepiandrosterone sulfate; ANA, antinuclear antibody; TSH, thyroid-stimulating hormone.

The abnormal lab values are indicative of mild nonspecific inflammation, subclinical hypothyroidism, and generalized autoimmunity patterning with androgenicity associated with a pre-existing diagnosis of PCOS.

INTERVENTIONS

The patient was recommended a strict diet for 30 days inclusive of organic/pastured meat, wild fish, pastured eggs, organic vegetables (excluding white potatoes), fruit, nuts, and seeds. All previous supplements were discontinued. Starchy root vegetables and potatoes were reintroduced after 1 month.

Lifestyle interventions included a recommendation for 11 minutes of daily practice of a meditation called *Kirtan Kriya*, using a 1.5-minute duration for *mudra* chanting volume in the pattern of sung, whispered, silent (2 cycles, totaling 3 minutes), whispered, and sung. The meditation begins with a 1-minute settling-in period to prepare and focus and concluded with 1 minute of awakening the body through stretching and wriggling the arms, hands, and torso.[3] She was also asked to initiate daily dry-skin brushing to stimulate lymph drainage and coffee enemas to support liver function.[4] The patient was asked to begin these lifestyle interventions concurrently with the dietary changes listed previously. After 1 month, a supplement regimen was introduced (Table 4).

OUTCOMES AND FOLLOW-UP

At first follow-up on June 13, 2016, it was discussed that her first menstrual period (June 5, 2016) after beginning the new therapeutic regimen was preceded by agitation, facial picking, and some expression of hopelessness exacerbated by her attendance at a family wedding and encounters with unsupportive family members. She was able to reach out for support to the author, her psychotherapist, and an emotional

Table 4. Supplements Prescribed After 30-Days of Diet and Lifestyle Intervention

Detox	
Chlorella (BodyBio)	6 capsules (1800 mg), 2 ×/d for 20 d
Sodium alginate (Genestra)	1 capsule (400 mg), 2 ×/d
Liver beef natural glandular (Allergy Research)	1 capsule (500 mg), 2 ×/d
Nervous System Support	
Potassium magnesium (Pure Encapsulations)	1 capsule (70 mg magnesium, 99 mg potassium) daily
Adrenal medulla natural glandular (Allergy Research)	1 capsule (100 mg) daily
Amino complex (Thorne)	1 scoop 2 ×/d
Total omega 3-6-9 (Barleans)	1 tablespoon 3 ×/wk
Hypothalamus natural glandular (Allergy Research)	1 capsule (500 mg) 2 ×/d
PharmaGABA-100 (Thorne)	2 to 4 capsules (100 mg/capsule) as needed for anxiety
Theanine (Thorne)	1 capsule (200 mg) 2 ×/d
Digestion Support	
Duozyme (Karuna)	1 capsule with each meal
Pancreas natural glandular (Allergy Research)	3 capsules (1275 mg) with each meal and 10 capsules (4250 mg) between meals 3 ×/d
Hormonal Balance	
Thyroid glandular (Allergy Research)	1 capsule (40 mg) daily
Maca (Femmenessence MacaLife, Natural Health International)	2 capsules (1000 mg) before breakfast and lunch
Sensitol (Designs for Health)	2 capsules (3.2 g), 2 ×/d
Berbercap (Thorne)	1 capsule (200 mg), 2 ×/d

freedom technique (EFT) practitioner to good effect. Her correspondence included:

> Hi Dr Brogan,
>
> I've been following your protocol to the letter and was doing awesome until about 3-4 days ago. I'm on day two of my period now and things don't feel real, feels like a really bad dream. I'm taking 4 of the Hypothalamus to sleep, but am so agitated that I'm not sleeping at all. I'm certainly not at the level I was before I met you but am still feeling very out of control and crying about 70% of the day. Is there anything we can do?
>
> Also, I am taking two of the GABA every 4 hours. I've eaten zero sugar, grains, or dairy since I met you. Up until my period came, it was the best I've felt in years. Highly agitated and anxious—like crawling out of my skin. Can't get any relief.

In light of this feedback, coffee enemas were increased to twice daily in the week before her cycle onset to accelerate hepatic hormonal detoxification and metabolism, and PharmaGABA and L-theanine dosed twice daily for sympathetic nervous system calming/antianxiety effect. It was recommended that she commit to a predawn meditation rather than simply a daily meditation.

The patient reported the following in an e-mail to the author 2 days after these recommendations:

> Dr Brogan, know that I have been doing the kundalini protocol you recommended to me in the morning for two days at 5:30 AM and it has helped immensely. My heart is so full of gratitude for you and while I know I have a lot of healing and work to do, for the first time in my life I feel empowered to heal myself and not at the mercy of a doctor or a drug. I am blessed to have found you.

During an episode from July 13 to July 16, 2016, she developed some suicidality that she connected to hunger, stating that she felt better with consumption of protein. She also noted consumption of dates were a triggering choice for her. With support, she was able to witness and move through these feelings that spontaneously remitted within 2 days.

At her follow-up on July 29, 2016, it was discussed that her subsequent cycle was symptom free with no picking, agitation, or suicidality. She complained of some residual constipation and bloating. Ground flax seed and resistant starches were reintroduced to her diet at this time.

She has remained symptom-free until the writing of this report 10 months later and is opening up a holistic treatment center for medication withdrawal, with her husband.

DISCUSSION

This case invokes several important points of consideration. It challenges the conventional model of mental illness—one of chronic, recidivistic, and potentially disabling pathology requiring life-long medication treatment. Here is a case of a treatment resistant patient who enjoys a level of symptom remission and vitality that seems to have been made possible through medication taper.

Hormonal Balancing and the Role of PCOS/Premenstrual Syndrome

Given this patient's catamenial psychosis, complete resolution of delusions after menses onset, and her initial—although not lasting—response to oral contraceptives, a hormonal driver to her pathology is clear. Diagnosed with PCOS and with a high-presenting dehydroepiandrosterone sulfate level, several interventions were targeted at hormonal balance including coffee enemas for hepatic support,[5] maca,[6] and glycemic stabilization through shifting her diet to on including a high proportion of natural fats,[7] berberine,[8] and inositol.[9,10] Case reports in the published literature support medication-resistant emergent psychosis related to PCOS, resolved with hormonal stabilization.[11]

Behavioral Iatrogenesis, Withdrawal, and Akathisia

A recent publication[12] explores the risks of behavioral and physical iatrogenesis associated with antidepressant medication treatment. This patient's first exposure to medication treatment was for off-label use—non-criteria-meeting restrictive eating without associated dysmorphia. With minimal effect from Prozac, she was trialed on Lexapro with her first experience of suicidality emerging within 3 months. Recent analysis of antidepressant trials reveal a 2- to 4-fold increase in suicidality with the top violence-inducing medications being psychotropics.[13,14,15,16] In fact, US Food and Drug Administration–approved warning labels include antidepressant-induced "anxiety, agitation, panic attacks, insomnia, irritability, hostility, aggressiveness, impulsivity, akathisia (psychomotor restlessness), hypomania, and mania."

In addition, withdrawal-related agitation may have played a significant part in this patient's diagnosis of BD in 2015 in the setting of Xanax withdrawal.

Food Antigenicity

Recent literature has implicated food-based proteins in psychiatric symptomatology including psychosis and depression. Casein and gliadin, specifically, have been linked causally to a range of symptoms.[17] A recent case report further confirms the relationship between gut dysfunction and manic psychosis in which a patient's presenting symptoms emerged after bariatric surgery and resolved with ingested charcoal.[18] Specifically, gluten has been demonstrated in crossover trials to induce depression and impaired cognition[19] as well as psychosis in susceptible individuals.[20] Assessment of psychiatric pathology in celiac patients has supported a statistically significant incidence of anxiety (panic), depression[21,22] bipolar patients, and schizophrenia.[23] This immunoreactivity is possible outside of a formal diagnosis of celiac disease and has been referred to as nonceliac gluten sensitivity.[24,25] Given this possibility, a trial of strict gluten and dairy avoidance is a low-risk, potentially high-yield clinical intervention.

Lifestyle Interventions

If we look at mental illness as a nonspecific indicator of bodily imbalance and inflammatory signaling, a low-risk, potentially high-yield synergistic strategy of lifestyle interventions has the capacity to send a "signal of safety" to the nervous and immune systems with measurable clinical outcomes within days.[26] The dawning of psychoneuroimmunology helps to evidence the potential for interventions such as meditation to impact the nervous and immune systems, and for dietary interventions to influence mood and behavior. This gut-brain bidirectionality has been explored in approximately 2 decades of medical literature.[27,28,29,30,31]

In this approach to patient care, a 1-month protocol of strategic nutrition, detoxification, and meditation precedes any personalized introduction of supplementation. *Kundalini* yoga meditation, *Kirtan Kriya* specifically, is an ancient technology that has a growing literature supportive of its effects on cognitive capacity and many subjective parameters of wellness.[3,32] It is theoretical that the impact of this meditation is amplified through predawn practice, perhaps based on ancestral biorhythms imbedded in our evolutionary history wherein awaking at the coldest point of the night (approximately 40 minutes before dawn) supports the healthiest and most resilient stress response.

Skin brushing and coffee enemas are interventions passed on to the author by Nicholas Gonzalez, MD. Despite a sparse literature, there exists a study from 1941 showing the detoxification capacity of coffee enemas that were capable of resolving intensive care unit near-terminal shock in several patients.[33] There is also a Harvard study from the *New England Journal of Medicine* that demonstrated—in 1922—that the use of coffee enemas successfully treated psychosis in hospital inpatients (patients were discharged in 2 weeks). Coffee enemas were even in editions of the *Merck Manual* until the 1970s.[34]

Unlike drinking coffee, which suppresses liver function through its stimulation of the fight-or-flight system, taking coffee rectally stimulates a nerve bundle approximately 12 inches (30.5 cm) above the rectum that reflexes to the liver for upregulation of detox pathways and increased production of bile/digestive support.[35] Skin brushing is another ancient practice that is thought to support lymphatic stimulation and flow.[36]

The recommended supplements were in support of hormonal balance, digestion, nervous and stress response support. Specifically, maca,[37,38,39] berberine,[40,41] and inositol[10,42,43] have evidence in support of insulin-resistance, PCOS, menstrual irregularity, and premenstrual syndrome.

Broad spectrum fatty acids including omega 3[44,45] and evening primrose oil[46] were employed for mood and hormonal support. L-theanine[47] and PharmaGABA[48] were used for periodic anxiety. Chlorella[49,50] and sodium alginate[51] were used short-term for detoxification support based on the high serum arsenic level. The glandulars including thyroid, adrenal, hypothalamus, liver, and pancreas can be thought of as nutritional augmentation, a strategy taught to the author by Dr Gonzalez.

The limitations of this report are inherent in the highly personalized nature of this care, despite the first month being a generalized approach. This is sometimes referred to as "N of 1 medicine" in that personalized lifestyle medicine interventions must be assessed and recommended on a case-by-case basis. This patient was motivated, supported by her spouse and therapist, and very much believed that this approach could help her—important preconditions for this outcome.

CONCLUSION

This case exemplified dramatic clinical remission after cessation of medication treatment and engagement of lifestyle interventions, which included dietary change, meditation, and detoxification. When medication demonstrates limited results, tapering combined with dietary interventions as the first-line therapy should be considered. Mind-body techniques have demonstrated effectiveness in the setting of anxiety and agitation, and hormone-supportive nutrients are valuable as an adjunct therapy.

PATIENT PERSPECTIVE

"You saved my life. Period. I would be dead or living a life of death, as I was, were it not for you. Never in my wildest dreams did I think that even 10 years ago I could have the peace that I am experiencing in my life as I am now. Not only am I alive, I FEEL alive. I want to be alive. I am 100% following the diet, coffee enemas once a day and two a day around my period, Kundalini every morning at 4:30 AM, and I have been talking to [my EFT practitioner] twice a week. Something or all things have clicked and I am truly at a loss for words on how to explain what it really feels like and how to thank you for what you have done for me and for my family. I am engaging with the world and also I am not getting 'hooked' by triggers and negative energy. I know every day I am still healing but realize how powerful and strong I am to have survived what I did."

After 7 months, the patient shared this e-mail:

"There is something happening to me that is taking me to places I'd never imagined and seeing life from an existential view instead of the day to day "white-knuckling" I used to experience all the time. I see myself being plugged into the universe and am beginning to hear and feel where I'm most needed. Coincidences are happening at a daily rate of meeting just the right person at just the right time. There is no fear for me in this, I've begun to not even be surprised when it happens because it happens so often. I listen, I observe, and I watch. I pause before I react.

This is better than any drug anyone could take—it's amazing."

After 9 months:

"I wanted to reach out to you to tell you where I am and keep you involved in my progress. it's difficult to convey in words how different my life is now from a year ago—other than a few intermittent days around my period I suffer from no anxiety. It is gone. Moving through this birth canal and into my true life would not have been possible were it not for you.

Of all the bridges I've crossed over the last year I think the biggest hurdle has been the actual withdrawal from the drugs. Certainly, I have done the work addressing this from a psycho-spiritual perspective, but I can't discount the inherent difference in how I just FEEL when I wake up in the morning and throughout the day which seems to only get more beautiful and more true the farther I move away from that last day I took one of those pills. I wasn't prepared for the visceral reaction I had to coming off of everything, certainly stopping the Xanax and the others cold-turkey wasn't a good idea and I know that now! But there is a separation that has occurred for me over these last 10 months, where I before thought these symptoms were 'me,' and they were something to be managed and controlled—no longer by the drugs but by breathing, EFT, meditation, etc. I thought coming off of the drugs was the biggest hurdle and once I had done that I would fall into myself and that was that. I see now that those symptoms were not me but were instead the after effect and withdrawal from the drugs. It wasn't until November–December, a full 6–7 months that I began to really see a big shift happening and it has increased dramatically daily since then. I can't convey to you what an obstacle this was to overcome, other than to tell you that I daily wake up and can't believe that I got from there to here. Some sort of alchemy outside of my physical body was definitely at play here because I know the horrible statistics. But also, I know how I really FELT then and how I FEEL now, and these feelings do not exist on the same planet."

INFORMED CONSENT STATEMENT

Patient has reviewed this document and consented to all of the information herein.

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