CASE SERIES

Psychotropic Drug Withdrawal and Holistic Tapering Strategies: A Case Series

Kelly Brogan, MD; Alyssa Siefert, PhD; Emily Whitson, BA; Leiah Kirsh; Virginia Sweetan, ND

ABSTRACT

This case series aims to further the understanding of psychotropic drug withdrawal symptoms, as well as how individuals may be supported using holistic approaches for long term mood support. A secondary objective is to contribute to the evidence base for differentiating psychotropic drug withdrawal from the resurgence of psychiatric symptoms. Patients are described in two groups based on the timeline of psychotropic tapering. Group A illustrates cases of tapering safely from psychotropic medications under the supervision of the author of this case series, and Group B describes cases of individuals who sought mood support for protracted withdrawal symptoms. Both groups were treated with dietary changes, mindfulness practices, detoxification-supported gut health protocols, hormonal regulation, and treatment of comorbidities. Use of complementary medicine reduced many of the acute symptoms of psychotropic drug withdrawal, such as sleep disturbances, decreased concentration, nausea/headaches, and depression, making the process more manageable for patients. Additionally, many of the initial psychiatric complaints were kept in remission. These methods present a sustainable alternative to long-term treatment of mood symptoms and comorbid chronic illnesses. This case series indicates the benefits of integrating holistic and conventional medicine in psychotropic drug tapering, and a call for further trials to create an evidence-based database to guide future treatment and taper protocols. (*Adv Mind Body Med.* 2019;33(4):4-16.)

Kelly Brogan, MD, is a practicing psychiatrist in Miami, FL, USA; Alyssa Siefert, PhD, is engineering director at Yale University in New Haven, CT, USA. Emily Whitson, BA, is studying Naturopathic Medicine and Integrative Mental Health at National University of Natural Medicine; Leiah Kirsh, is a medical student at St. George's, University of London; Virginia Sweetan, ND, is a Naturopathic Doctor in La Jolla, California, a Licensed Vocational Nurse, and a US Hospital Corpsman Navy Veteran.

Corresponding author: Kelly Brogan, MD
E-mail address: drbrogan@kellybroganmd.com

INTRODUCTION

Mental health disorders are pervasive globally, with depression and anxiety afflicting 322 million and 264 million people, respectively.[1] Depression is now the leading cause of global disability, with greater than 7% of Americans experiencing its effects in any given 2-week period.[2] Despite the prevalence, chronicity, and severity of each of these conditions, standard-of-care offers limited gains with respect to symptom resolution and quality of life.[3] In light of the need for a sustainable therapeutic path for these common conditions, the medical community is presented with an opportunity to explore and build evidence for effective, accessible means to wellness. This series presents 12 successful cases of dramatic clinical remission of psychiatric symptoms after cessation of medication treatment and engagement in lifestyle interventions.

Refocusing attention on a holistic model of psychiatric care for the past 10 years, primary author Kelly Brogan, MD, has successfully tapered numerous patients off their psychotropic drugs (PD). While individual considerations and treatment recommendations were made with respect to comorbid and concomitant diagnoses, lifestyle changes were at the crux of all tapering regimens. In some instances, patients had ceased their PD prior to this engagement and sought intervention due to refractory withdrawal symptoms, which were addressed with lifestyle modifications aligned with the tapering population. Consistent with biological, social, and psychological theories underlying the

Table 1. List of Symptoms Associated with Psychotropic Drug Withdrawal

- Insomnia and sleep disturbances
- Nausea
- Headaches
- Anxiety
- Decreased concentration
- Agitation, aggression
- Depression
- Dysphoria
- Serotonin-specific symptoms:
  - Tachycardia
  - Dizziness
  - Diarrhea
  - Confusion
  - Fatigue
  - Flu-like symptoms
  - 'Zaps' or electric-shock sensations
  - Myoclonus

epidemiology and pathology of mental health diagnoses such as Major Depressive Disorder (MDD) and Generalized Anxiety Disorder (GAD), a multifaceted approach to establishing and maintaining wellbeing was utilized. Specifically, dietary changes, mindfulness practices, and detoxification-supported gut-health protocols resulted in significant improvement—and in some cases resolution—of psychiatric symptoms.

A secondary endeavor of this case series is to highlight the presence, duration, and severity of PD withdrawal in these 12 cases. This case series seeks to contribute nuanced evidence to the increasingly common notion in psychiatry of differentiating between PD withdrawal and the re-emergence of an underlying mood disorder once medication is decreased or discontinued. Withdrawal from two commonly prescribed classes of psychotropic medications, Serotonin and Norepinephrine Reuptake Inhibitors (SNRIs) and Selective Serotonin Reuptake Inhibitors (SSRIs) has been defined by Chouinard et al. in 2014.[4] Table 1 presents a list of symptoms that classify our working description of PD withdrawal, which may be experienced as similar or different from the originating mood complaint of the patient.

Generally, the clinical presentation of withdrawal from PD differs by drug class, drug half-life, duration of use, and how recently the drug was used, underpinning the need for more clinical evidence elucidating psychotropic drug withdrawal. This case series is a response to this invitation to develop a more nuanced understanding of psychotropic medications, their complications, and their longer-term effects on mental wellness and overall health. Chouinard and colleagues note that "...new and rebound symptoms can occur for up to 6 weeks after drug withdrawal, depending on the drug elimination half-life, while persistent post-withdrawal or tardive disorders associated with long-lasting receptor changes may persist for more than 6 weeks after drug discontinuation."[4]

The following Case Reports are organized into two groups: Group A includes patients who completed PD tapering supervised by the author of this case series, and Group B includes those experiencing protracted withdrawal symptoms and who were seen in the clinic for mood support excluding psychotropic medication. For all participants, mind-body treatments for holistic wellness were applied in the realms of diet and digestion, detoxification, and mindfulness.

CASE REPORTS

Group A: Supervised Psychotropic Drug Tapering

Case 1: 36-year-old Female

AM is a 36-year-old Indian female presenting with postpartum-onset MDD and generalized anxiety symptoms treated with Lexapro for 1 year. She noted initial benefits that have waned over time, as well as significant sexual side effects. She was infrequently taking Xanax for a year, and then passively discontinued. Post-taper side effects included irritability, low mood, anxiety, daily panic/intensified anxiety symptoms, lack of motivation, and tearfulness. Her general practitioner (GP) started her on Wellbutrin XL, 150 mg, 1 month prior to presentation, and she noted some mood improvement. On consideration of taper, she was treated with Wellbutrin XL, 300 mg, Ativan, 0.5 mg, for severe anxiety; gabapentin, 100 to 600 mg, for milder anxiety as needed; and Prozac 20 mg. She initiated an anti-inflammatory diet, as well as supplements included omega-3 fatty acids and a multivitamin for mood support. She was instructed in Coherent Breathing for anxiolysis. In July 2016, AM independently tapered off of Wellbutrin, without incident.

March 2011: Wellbutrin, 300 mg daily; Prozac, 10 mg, once per week; Ativan, 0.5 mg, as needed; gabapentin, 100 to 600 mg as needed.
September 2011: Added citalopram, 10 mg daily; Ativan raised to 0.75 mg, as needed.
April 2013: Reduced citalopram to 5 mg daily.
August 2015: Reduced citalopram dose by 1 mg every week.
September 2015 onward: No citalopram.
July 2016: Wellbutrin 150 mg daily.
August 2016: Wellbutrin discontinued.

This patient's taper was uncomplicated, and post-taper, the patient described that with the absence of medication and introduction of lifestyle and diet changes, she was doing "very well."

At follow-up with the patient in 2018, AM Described her experience: "I've had, what I believe, a significant number of wins with what has been reclaimed in my life through medication taper due to Dr Brogan's methods and guidance.

"I had been prescribed anti-depressants for my anxiety and depression from dealing with the stress associated with having two children, an extremely demanding job, and a failing marriage. It was given to me as a band-aid solution that caused a number of additional issues in my life."

"I vividly recall walking around with this heavy weight on my shoulders, like it was a struggle just to walk down the street. My body just felt like I was constantly giving an adult a piggyback ride. On top of that horrible feeling, I had gained 40 pounds because I had no interest in moving around and doing anything. My mind was numb for years with this constant brain fog and inability to concentrate. My feelings were muted, even towards my adorable kids. I honestly don't know how I functioned at work like that, looking back. My hair was thinning and falling out, I had adult acne in my late 30s, and my period symptoms—such as swollen breasts—were super painful. I remember sitting in meetings and my neck would start twitching out of nowhere from the meds. My hands shook like I was an old lady. It was a horrible experience. I think the worst part of it all was the loss of my libido, which caused so many problems for my marriage. I had no interest whatsoever and hated sex so much, let alone couldn't stand the pain due to the dryness."

"[I was] tapered off my meds in a very short period of time, which has been a complete life-changing event. Besides getting off the meds, the changes to my diet and the coffee enemas have allowed my body to adjust and be able to handle life. I can feel again! My brain has never been so sharp, leading me to finally get promoted at work! My acne is gone! I love having sex, and it is enjoyable and not painful! I can pour a drink without it spilling all over the place! I've lost the 40 pounds that I gained! I feel human again!"

Case 2: 53-year-old Female

BN is a Caucasian, 53-year-old previous patient of Dr Brogan's who, after nearly a decade of consistent MDD management utilizing several psychotropic medications in varying doses (eg, bupropion XL, lorazepam, clonazepam, aripiprazole, fluoxetine, paroxetine, venlafaxine, divalproex sodium, trazodone, escitalopram), requested to be tapered off her current bupropion. The patient was formally diagnosed with recurrent, mild MDD and hypoglycemia, unspecified. A family history of depression was reported.

The starting dose of bupropion was 150 mg, and the taper was completed within 9 months. BN initially decreased her dose by 15 mg monthly for 5 months, then decreased her dose by 10 mg for the duration of the taper. Lifestyle modifications and supplementation recommendations were given. At the last visit, BN reported that she was doing coffee enemas weekly; however, she was consuming gluten, dairy, and sugar and was consuming alcohol nightly. Additionally at this visit, she endorsed anxiety as chest pain and relayed anxiety associated with new employment.

An update in 2018 confirmed being free of PD since that last visit. The patient stated "I did not find the medication taper difficult as it was gradual. The diet has been harder to stick with! After years of being on anti-depressant medication, I am off and have no intention of returning." The patient also relayed desire to stay PD-free and focus on diet, breathwork, hypnosis, and meditation. "I am looking for soul-satisfying work, if that is possible, and am now involved in pro bono projects for nonprofits that align with my interests."

Case 3: 33-year-old Female

CO, a 33-year-old Caucasian female diagnosed with GAD and MDD, presented for help with psychotropic medication management while 21 weeks pregnant. Medication selection prioritized minimal milk penetrance and reduction of teratogenic risk (based on available data as of September 2012), as well as efficacy for GAD and MDD. She gave birth in 2012, and since initiated sertraline under supervision of a different physician, which she titrated up to 150 mg but continued to find minimal relief. Sertraline was cross-tapered over 2 months to fluoxetine with amino acid augmentation (5-HTP) and antioxidant support (*N*-Acetyl Cysteine, or NAC). Fluoxetine was then tapered from 60 mg on 3/19/2013 to 40 mg on 3/26/2013, after which CO noted a resolution of her long-standing abdominal paresthesias. One month later, by 4/29/2013, CO had safely discontinued fluoxetine and noted improvement in the intensity and frequency of her ruminations. She had been using lorazepam (4-5 times weekly) for anxiety since 2012, which she successfully tapered in 2016 from 2.75 mg to zero over 3 months by decreasing the dose by 0.25 mg weekly.

With the addition of an anti-inflammatory diet, Low-Dose Naltrexone (LDN), and a Cognitive Behavioral Therapy (CBT)-based pregnancy and postpartum workbook for anxiety, her sleep and mood were greatly improved. With any accidental gluten exposure, an almost immediate reaction of obsessive and compulsive thoughts occurred for this patient. In 2015, she reported being happily "psychiatric symptom-free," with stable sleep, better energy, regular bowel movements, increased exercise tolerance, and peace with her body image.

At follow-up in 2018, CO stated: "I'm doing really well actually. I feel more energy, my mind feels more clear, and I am more like my true self than I have been in years! Since cutting gluten years ago and following Dr Brogan's protocol I have not had any symptoms of anxiety (ruminative thinking, intrusive thoughts, etc). Since our last appointment I have cut dairy. Sleep was the hardest part of coming off medication. While it has improved a lot, there are nights where I still have insomnia. Overall, it's much better though and when I do sleep "naturally" now (without the meds!) I sleep very deeply. Muscle tension was also very difficult coming off the meds but I had a lot of massages and hot baths to help. I did daily coffee enemas which helped tremendously."

Case 4: 30-year-old Female

DP is a 30-year-old Caucasian female with a family history of anxiety and diagnoses including GAD, dysbiosis/candidiasis, acne, subclinical hypothyroidism, and reactive hypoglycemia. Original pharmacologic treatment for depression was initiated because of brain fog and dizziness. Patient began SSRI treatment 2 years prior to seeing Dr Brogan, but was desirous of taper. Sertraline taper was initiated with another provider; however, patient experienced refractory withdrawal (eg, brain fog, increased agitation, panic attacks, palpitations, and hair loss) with regimen of tapering by

half-dose each month. Prior to sertraline, this patient had been prescribed citalopram, which resulted in severe side effects of agitation and akathisia. Buspirone was briefly used before resuming sertraline. Sertraline taper began with Dr Brogan at 3 mg and proceeded to decrease by 0.25 mg every 2 to 4 weeks, until discontinued 10 months later. At the time, it was noted that her acne was much improved.

In addition to the taper, this patient was prescribed and was compliant with dietary changes, supplemental thyroid support, Kirtan Kriya meditation, NAET (Namburipad's allergy elimination techniques), digestive enzymes, probiotics, left nostril breathing, and a preference of bentonite clay enemas over coffee enemas. After completion of the taper, the patient update attributes much of her success to the use of Kirtan Kriya as part of her treatment regimen.

At her update in 2018, the patient related: "My naturopath recommended I read Dr Brogan's book *A Mind of Your Own*. I continued the diet for a couple of months, and I felt so much better that I decided to try and taper off the medication with the help of my psychiatrist. I was only taking half a pill of 25 mg Zoloft a day, which was all I could handle without feeling mania. I cut my pill to 12.5 mg for a week, and then I cut the pill into quarters for the next week. This led to the most difficult period of my life. I was having panic attacks daily, I could not sleep, and I felt as though I was on speed. My hair was falling out, I had flu symptoms, and I was a nervous wreck."

"I got on the Internet and realized I had withdrawal, although my psychiatrist told me that this was just my anxiety and it should be a reinforcement that I needed medication. She said many people get off these medications with no problem. I knew this was a pharmaceutically induced mania because it was so far from who I was at heart, and because so many other people were reporting similar symptoms directly after reducing their dosage of SSRI."

"I realized then, if I was going to get off these medications, I needed the support of someone who was seasoned at supporting people through this process. I knew how hard this was going to be. I made an appointment to see Dr Brogan. She tweaked my diet and prescribed the Kirtan Kriya. The Kirtan Kriya was revolutionary for me. After doing it for 30 days, I felt an intense deepening of my spirituality and faith in God. I had always believed in God, but this just gave me a feeling of closeness to what I can only describe as the divine within me. During the meditation, I experienced such a sense of well-being that I never missed a morning.

"We began tapering down by 0.25 mg every 2 weeks. At times it was manageable, and at other times, I experienced a lot of difficulty. For instance, when I went below a dose of 1 mg, I again had sleepless nights and I missed my period. I would have never been able to get through the down-dosing without doing the bentonite clay enemas (the coffee enemas didn't agree with me). The mood stabilization the enemas offer was the necessary antidote to the mania. I only did the enema when I tapered, because otherwise, the diet and meditation practice were enough to stabilize my mood."

"It took me 1 full year to get off of 12.5 mg of Zoloft. Towards the end of the year, Dr Brogan also referred me to Swaranpal, a therapist and Yogi. Swaranpal and I do half talk therapy and half energy work when we meet. Miraculously, after I visit Swaranpal, my brain fog completely abates. I could not have believed this story if I read it 3 years ago. It is only in experiencing it first-hand that I can contemplate the miraculous shift. The gift is that I am starting to feel like I can plan my future. I am optimistic and confident. I am in touch with intuition and self-knowledge I did not have. I have always loved working and loved children. I can feel hope about my career and hope about bringing a child into this world. I don't feel paralyzed."

Case 5: 34-year-old Female

EQ is a 34 year-old Caucasian female with an 11-year history of GAD. This patient had made 3 previous attempts to taper, each over the course of a month. Over the course of a year she tapered citalopram from 30 mg to 0.6 mg with her doctor. Unable to tolerate any further, she began a new taper regimen with Dr Brogan in 2012.

The patient tapered by 0.1 mg of citalopram as able, with the addition of supplements. She was prescribed NAC, amino acids, a multivitamin, tryptophan, Kavinace, Ashwagandha, and turmeric. A calming preparation of 5-HTP/tryptophan and Neurocalm was used for sleep onset. It was suggested that she try acupuncture and EMwave and Fisher Wallace at level 2. As lab results confirmed low levels of vitamin B_{12}, intramuscular B_{12} was suggested at 2500 mg triweekly.

Weeks 1-7: 0.6 mg of citalopram, 0.1mg taper as able.
Weeks 8-12: No citalopram. Valium 1 to 5 mg as needed for sleep onset.
Week 12+: Valium replaced with Ativan 0.5 mg, orally as needed.

Post taper, EQ continued with sleep medications but did not return to PD. The patient was able to complete a healthy pregnancy and gave birth to a baby girl. In 2017 she reports being 5 years off of SSRIs, and she no longer experiences physical symptoms of anxiety or feels "frozen" by anxiety. She feels in control and is enjoying her life with her daughter and husband.

At an update recorded in 2018 she recounted: "It took 2 years and many health professionals, but I now feel such relief. Before the meds, I dealt with anxiety, obsessive thoughts, and chest tightness. I believed my brain was "broken." I wanted to have a child but didn't want to be on medication while pregnant or nursing, so I tried to come off the medication. SSRI withdrawal, before meeting Dr Brogan, sent me into a scary place of severe insomnia (sleeping 1 to 1.5 hours a night), chest pain, depression, and wild hormone dysregulation. I now have life. My brain isn't broken at all … I can't remember the last time my chest hurt or I was frozen by anxiety. Nothing is perfect, but I know that I am in control—not a pill, not a doctor, ME."

Case 6: 32-year-old Female

FR is a 32-year-old Caucasian female presenting with a 20-year history of GAD treated with medication and therapy. She has tapered and switched medications over the years, describing the process as very difficult and unsustainable. The patient presented wishing to taper from 30 mg of duloxetine because of signs of dependency, side effects (including nausea, low libido, fatigue, constipation, and micro withdrawals if late with medication) as well as her plans to conceive in the future. She was also taking evening primrose oil and zinc.

Pre-taper preparation included diet recommendations, increasing water intake, the formation of a personalized herbal/botanical/supplement plan based on blood tests, coffee enemas, bicarbonate baths, dry-skin brushing, Kundalini yoga, meditation, and 3 to 6 minutes of Sat Kriya meditation daily. After a month of these changes, she began a 15-month PD taper (see below).

At 20 mg, her withdrawal symptoms (lethargy, fogginess, poor concentration, and mood) appeared for 10 days. She otherwise expressed feelings of "deep contentment" and increased energy—with a slight return of her libido and improved bowel movements. Her taper went smoothly until she reached 5 mg of duloxetine, at which point she endorsed feeling moody, tearful, and irritable. Later in the taper, she reported improved memory with decreased brain fog and improved sleep. Table 2 describes the tapering process for FR.

Support supplements: The patient continued to take Mycoimmunity and Rhodiola for 1 month of restoration and recovery. She continued the dietary and lifestyle changes, as well as the general support supplements.

FR reported feeling stable for 4 months post-taper, with the return of her anxiety after a course of antibiotics for strep throat. Over a year later, FR continues to live without the use of PDs. She feels that the lifestyle changes and strategies she learned in this process allowed her to better cope with this anxiety. She now feels that she can see clearer, has a growing sense of contentment, and her libido has increased.

Her update in 2018 recorded: "I first saw Dr Brogan in 2016. At 32, I had been on SSRIs for 20 years and wasn't convinced of their efficacy. I also wasn't convinced that finding a traditional psychiatrist with a purely clinical approach to tapering would work for me. Before the taper even started, we cleaned house. Bloodwork was evaluated, diet was examined, coping mechanisms looked at—we set the stage not only for the next year and a half (the length of time it took me to taper off 30 mg of Cymbalta) but also for the way I live my life off medication.

"My taper process was relatively smooth compared to other individuals I've known who have come off medication. At points it was uncomfortable—I would feel anxiety flood my body for no apparent reason. I felt odd bodily sensations like brain zaps, stomach upset, disinterest in food, and numbness. I also felt feelings of elation and a greater compassion for people and events that made me feel more present and awake."

Table 2. Tapering Progression for Patient FR

Weeks 1 – 4: 25 mg of duloxetine
Weeks 5 – 8: 20 mg of duloxetine
Weeks 9 – 10: 17.5 mg of duloxetine
Weeks 11 – 12: 15 mg of duloxetine
Weeks 13 – 14: 12.5 mg of duloxetine
Weeks 15 – 34: 10 mg of duloxetine, decreasing by 1 mg every 2 weeks
Weeks 35 – 38: 5 mg of duloxetine with added Relax-ALL for sleep.
Weeks 39 – 43: 4 mg of duloxetine
Weeks 45+: No more duloxetine

"These feelings didn't surprise me. What I was most taken aback by was what would arise after the taper was complete. For a few months after the taper, I felt stable. I was in grad school at the time and despite the 24/7 pace, my energy was good, I wasn't suffering from bouts of anxiety (the ultimate measure of success at that point) and I felt deeper engagement to the world around me. And, an added plus, my sex drive started to come back. It was slow at first, but it was a significant and welcome change in my marriage."

"Overall, I felt like I was seeing things in a clearer way and had a growing sense of contentment. Then, after 4 months of being off the meds, I became ill with strep throat. A course of antibiotics later and my anxiety resumed. I had heard it is common to have side effects from the medication long after the taper, but it surprised me nonetheless to have such a significant setback."

"I observed that all my fears were anticipatory—I was scared about things that *might* happen, concerns about my body, and hypochondriac thoughts that were at times paralyzing. Meditation was a way for me to watch these thoughts without giving them any additional importance or weight. I started to realize that my fearful thoughts were masking what was at the root of my anxiety, and so, I have begun the process of reconciling what that anxiety is truly about."

"Though it feels as if I have just begun starting to explore what is at the root of my anxiety, I am closer to understanding it than I ever was in the 20 years I was on SSRIs and in therapy. In sum, I feel fundamentally different. I have confidence in my sense of self; that I can healthfully cope and take ownership for my emotions and stressors. I have consistent energy—it's stable throughout the day and doesn't dramatically ebb and flow like it did over the last several years. I am cognitively sharper. My ability to absorb and process information is better now than it ever was. My relationship is healthier—I feel I am able to give my partner what he needs in a way that I wasn't able to before."

"This has not been an easy process, but it is certainly one that has been worth the climb. It has empowered me to make the right choices for my health and has allowed me to move through the world with a newfound confidence."

Case 7: 42-year-old Female

GS is a Caucasian female with a history of anxiety spectrum symptoms including PTSD, panic, and GAD as well as depressive episodes and bipolar disorder (by patient report). Her primary mental health diagnoses consisted of panic disorder without agoraphobia and GAD. Medical diagnoses included spinal disk fusion, sleep apnea, acne, and TSH suppression. Initial lab values showed TSH suppression and elevated C-reactive protein (CRP), a marker of inflammation. Early labs also confirmed increased cholesterol and triglycerides, decreased RBC, Hgb, and Hct and prior exposure to EBV.

Initial care with this patient began in 2010, with the use of sertraline, lorazepam, and adjunctive dietary and lifestyle modifications. At the onset of a 3-year slow taper process, this patient was taking 86.5 mg of sertraline daily. Her taper regimen consisted of a reduction of approximately 6.5 mg per month until a 50 mg dose was reached. The taper then proceeded with a progressive, narrow reduction in dosages, starting at a decrease of 5 mg monthly and ultimately resulting in a 1mg per month decrease until sertraline was discontinued.

Taper support supplement recommendations included: Neurocalm, tryptophan, Lavella, PharmaGABA (as needed), Hypothalamus and Adrenal support, Insomnitol, and sleep melts. Additional recommendations included Seroplus, B_9, B_{12}, vitamin D_3, Sensitol, Ovaben, Hormonal balance, Berberine, Mixed amino acids, Berleans, phosphatidylcholine, multivitamin, kava, licorice, MCT, Lion's Mane, NT Factors, Relaxxal, Glymagz, Relora, salt water, as well as increased water intake (filtered), meditation, left nostril breathing, Uvex Ultra-spec 2000 orange tinted glasses at night, coffee enemas, exercise, Emotional Freedom Technique (EFT), and Bach Flower Essences.

GS was pregnant twice during the course of her PD taper. She reported being gluten-free since October of 2015. Upon termination of care, resolution of TSH suppression, CRP elevation, hypercholesterolemia, hyperlipidemia, and indications of anemia were achieved as verified by lab studies. The patient recounted that discontinuing PD resulted in a significant improvement in her symptoms and her outlook on life. While she acknowledged challenges and growth throughout this process, she stated that she "remember[s] how much better [she is] today than just three months ago" and that she could "now envision a time that [she is] just busy living, instead of managing."

At a 2018 update she stated: "I took my last SSRI pill just over 2 months ago after a multi-year taper. I never felt harmed by the medication, quite the contrary, I felt saved by it. I enjoyed some of the best moments of my life while on it, including the birth of my two beautiful children.

"For a while I felt angry at myself for being incredibly reluctant and not seeking a prescription earlier, looking back on the very difficult times before medication with regret. Just below those feelings, however, was a clear understanding that I should not be on SSRI's long-term and that there could be consequences to my health. Something in me was open to going on this journey with Dr Brogan, a journey that unfolded without me knowing the gravity of the transformation that was taking place."

"I tapered uneventfully for a long time while almost incidentally becoming educated in Dr Brogan's [protocol]. Life hit me about a year ago, where the combination of personal events and SSRI withdrawal collided. At that point I had to take a leap of faith to know I would not only be okay without medication, but that I could be healthier than I ever knew was possible."

"It has been an incredibly difficult year. I look back on it and feel accomplished that I'm able to process it in what feels like an emotionally healthy way today. I have changed my life in ways that only hitting emotional rock bottom could facilitate. Through the worst times with panic attacks and physical depletion, I maintained resolute determination to continue the tapering process and get the medication out of my body. I took my last pill just over 2 months ago. After committing to a daily detox protocol since May, I was able to get through the acute withdrawal phase and physical symptoms."

"The real emotional healing has just begun. I find myself steeped in memories of 8 to 9 years ago, before medication. Memories that remind me of the work I never did that I now need to address. I keep reminding myself that I'm not going backward but that I have the tools to repair the damage and build new roads for the wonderful journeys ahead. There are days my stress response scares me and I wonder if I'm ever going to feel healthy. I ruminate about thoughts of physical illness and fear crisis scenarios. But I keep going back to the basics, rely on a proven self-care routine and anxiety management tools, ask my amazing support team for help, and remember how much better I am today than just 3 months ago. I can now envision a time that I am just busy living, instead of managing, and that is very exciting."

Case 8: 39-year-old Female

HT is a 39-year-old Caucasian female, presenting with a history of GAD, recurrent, moderate psychotic features, and reports of primary insomnia. She presented wishing to taper from her medications of Zoloft, 100 mg; Wellbutrin, 75 mg; and clonazepam, as needed, for insomnia, because of unwanted side effects (including flattened emotional range, sexual side effects, and jaw clenching). She was also taking niacin and zinc.

Table 3 describes the tapering protocol for HT. The plan began by tapering Wellbutrin by 37.5 mg per month, then Zoloft by 12.5 mg per month. Her supplement plan included amino acid support, GABA, tryptophan, NAC, phosphatidylcholine, EMwave, and Fisher Wallace at level two, all to help with the tapering process. She also began a lower-glycemic-load diet and eliminated dairy. After reviewing her blood results, iodine, ferritin, vitamin D_3, and vitamin B_{12} were added.

A few weeks after tapering Zoloft, the patient presented with many symptoms consistent with medication withdrawal (increased agitation, irritability, and insomnia). In response, she was prescribed inositol, ashwagandha, St. John's Wort and lithium orotate, as needed. She also began lipid replacement therapy, a higher dose of amino acid treatment, methyl-B complex, and magnesium glycinate, as needed for sleep, as well as mindfulness exercises. Her treatment plan was further altered as her symptoms changed, providing her with an individualized program. For example, when the patient reported new onset of insomnia and related anxiety, which she has felt in past tapers, she began use of a cranial electrotherapy stimulation (CES) device to improve her mood and anxiety, as well as new supplements.

After tapering from Klonopin and Valium, the patient noted "I've been sleeping more soundly than I have since I was young" and described a newfound clarity and appreciation of her environment. She still follows the diet recommendations, though less strictly, and continues exercise for therapeutic relief.

The patient's 2018 update recorded: "I'm doing well! I've never gone back on psychiatric medication since we worked together and haven't taken as much as a sleeping pill. Those 6 months of discontinuance were about the most difficult of my life but I would do it again. I got so much back. I didn't realize how numbing the medications were and once I returned to hearing the birds and noticing the flowers, I knew I did the right thing. I sleep more soundly than I have since I was young. I still follow the diet recommendations (ish), never really got into meditation but my running is therapeutic. I moved to Nashville about a year ago and am enjoying an improved/less hectic lifestyle."

Table 3. Medication Tapering Protocol for HT

Psychotropic Taper
- Weeks 1 – 4: Wellbutrin 37.5 mg and Zoloft 100 mg
- Weeks 5 – 8: Wellbutrin 0 mg and Zoloft 100 mg
- Weeks (unknown): Zoloft taper to 12.5 mg
- Weeks (2 months): Zoloft 12.5 mg to 6.25 mg, then 2 mg until discontinuation
- 2 months of no PD
- 1 month of Klonopin 0.75 mg for sleep onset

Sleep Aid Taper
- Weeks 1 – 2: Rotate Valium 7 mg, Klonopin 0.75 mg, and Sonata 5 mg
- Weeks 3 – 10: Klonopin 0.5 mg nightly with 1 night off per week and Valium, as needed
- Weeks 10 – 14: Tapered Valium to 1 mg, Klonopin as before
- Week (unknown): Discontinued Klonopin and Valium.

Group B: Protracted Withdrawal or Unaddressed Medical 'Psychiatric Pretenders'

Case 9: 54-year-old Female

IU is a 54-year-old Caucasian female who came into the office after her menopause initiated anxiety, depression, insomnia, hopelessness, and pain. She arrived having tried several antidepressants and with a diagnosis of Hashimoto's Thyroiditis which was left untreated. In February 2015, her Thyroglobulin Antibodies (TgAb) and Thyroid Peroxidase Antibodies (TPOAb) were both elevated at 158.10 IU/mL and 606.90 IU/mL respectively, reflecting her symptom picture of Hashimoto's Thyroiditis. After a deeper look into her symptoms using blood work, a serious vitamin-D deficiency, heterozygous MTHFR polymorphism, and mercury toxicity were discovered, which likely compounded her psychiatric symptoms. First-line interventions included thyroid glandular supplementation, a strict gluten-free diet, detoxification protocols, and mindfulness practices, among other interventions. As of March 2018, the patient's heavy-metal panel was negative, and her thyroid antibodies were reduced from 3 years prior, indicating a stabilization and gradual healing of this long-term autoimmune condition. Today she reports feeling well again, supported by the addition of many tools to handle stressors and emotional lows. IU champions the role of "belief" and trust in herself, which she accessed through meditation, Kundalini yoga, chi gong, and "real community."

At her 2018 Update, the patient stated: "When my menopause started 5 years ago, everything that I was fell apart like a sandcastle. I had hot flashes. I couldn't sleep. I was anxious and depressed. I slowly slipped into total pain and darkness, becoming hopeless. The doctor I was seeing immediately prescribed me an antidepressant that it did not work for me. After a day and a half on it, I thought I was going to go crazy or die. The following week, the doctor tried another medication that also did not work for me. The effects of it were so horrible that I had to call the other on-call doctor that weekend, thinking that it was the end of me. Of course, I stopped that medication as well. But my doctor kept on trying with another medication, and after the third one that was it. He said I was among that smallest percentage of people that couldn't tolerate anything and that's why I couldn't get help. I was in so much emotional pain. I was hardly functioning and felt completely helpless. My physician routinely told me that I had Hashimoto's but that there was no cure for that either, and I had to wait until it got worse before they could put me on a thyroid medication.

"When I got an appointment with Dr Brogan I didn't expect much. Going to see her was my last desperate attempt to find some hope. Nobody ever asked me the in-depth questions that she did. Nobody ever did so many tests. Nobody ever gave me so much time to talk. And as a result, she found out a lot. Besides my Hashimoto's and hormonal misbalance, I had high levels of mercury and very low levels of vitamin D…"

"My healing process was not typical. It was slow. I already was eating mostly gluten-free, but in my case, everything had to be followed 100% in order to work. Every little mistake would set me backwards. Besides the

food protocol, the most important thing that I had to incorporate daily was belief. I was the biggest doubter in my own strength and in my own healing. I had been disconnected from my real self for such a long time, and was scared of a potential new me. I was lonely and didn't have a community to support me, so I relied on every article that Dr Brogan wrote, every piece of advice she gave. My appointments with her were not only medical. On top of all the changes I was implanting in my life, Dr Brogan not only provided me with hope, support, and trust, but with a real community as well. Meditation, Kundalini yoga, and chi gong have become equally as important to me, if not more."

"I feel well; knowing that my process is not over, that I'm still learning and changing. Even when times get hard, when some pain that was buried a long time ago in my childhood shows up for no apparent reason, I have many tools now to handle it and I trust that it will go away. Thank you, Kelly, for showing me the light at the end of the tunnel."

Case 10: 54-year-old Female

JV is a 54-year-old Caucasian female who sought post-taper care with Dr Brogan because of "severe bouts of depression." The patient had tapered off escitalopram 18 months prior and experienced protracted withdrawal in the setting of multiple life stressors (eg, menopause, mother's death, dissolution of marriage, hurricane, dietary changes, and insomnia). Diagnoses included MDD, GAD, and menopause. Positive family history for both depression and anxiety was noted. Prior to care by Dr Brogan, the patient was on escitalopram from 5 mg to 20 mg maximum for a period of 7 years. Over the course of 16 months, the patient adhered to dietary modifications, a daily supplement regimen, regular exercise, and meditative practices. Additionally, Low Dose Naltrexone (LDN) was initiated at 4.5 mg and utilized for approximately 9 months for a positive ANA finding that resolved during this time, with the patient reporting improvement in sleep with use.

Upon the termination of care with Dr Brogan, this patient relayed that an additional 6 months of supplementation and psychoanalysis were necessary to "feel improved symptoms and awareness." Patient further conveyed continuing to adhere to a 3-week-on, 1-week-off supplement practice which resulted in feeling mood dips during the 1 week off. She reported that she continues with supplements, including Lavella and attributes much of her overall improvement to supplement use. Additionally, JV relayed that her therapy with Dr Brogan allowed her to keep "perspective on the process and life in focus."

In 2018, the patient reported: "Since being off medication, my overall mood has shifted through stages. My first stage felt like a ricochet with depression symptoms cropping back up in full force. Several life changing events also made this stage extremely challenging. Menopause, my mother's death, my marriage dissolving, changes to my diet and incessant insomnia confronted my coping skills.

"It took about 6 additional months on supplements and psychoanalysis to feel improved symptoms and awareness. I continue with supplements recommended, including Lavella, on a 3 weeks on and 1 week off basis. On that week off, which sometimes extends to 2, I feel emotional dips which include mood and anxiety that quickly shift once back on my supplement schedule. I would say the overall improvement I've experienced has as much to do with the supplements used to taper my body from meds to the therapy I receive(d) with Dr Brogan which helps keep perspective on the process and life in focus."

Case 11: 51-year-old Female

KW is a 51-year-old Caucasian female who presented with several physical diagnoses, disabling depression, and relayed a history of extensive childhood trauma, three suicide attempts, and substance dependence. She was experiencing migraines, acne rosacea, hypothyroidism, neuropathy, fatigue, weakness, and intermittent pain in her lower extremities. After "being medicated for 25 years," she had discontinued all PD upon presentation, was no longer suicidal, and was seeking a holistic approach to support a stable mood and address persistent PD withdrawal symptoms of low energy, brain fog, fatigue, and cyclical thoughts.

Treatment goals included cultivating stress resilience and parasympathetic tone, enhancing detoxification and sleep, and optimizing digestion and nutritional status. Dietary interventions included increasing probiotic and fermented foods, and modulating blood sugar with intake of starchy vegetables. Daily mindfulness, coffee enemas, and targeted hormonal support with glandular supplementation, as well as homeopathic support for sleep, each contributed to decreased brain fatigue, and steady improvement of mood and motivation to the point that she was able to seek out supportive community contacts toward the end of treatment.

In 2018, the patient reported: "I'm going to be honest, this has been a hard road! I was disabled by depression from 1994 to 1999, Then starting around 2003, I became totally disabled for the second and final time, unemployable, socially unreliable, isolated and totally dependent on a significant other. My world became and was very small. I was a very wounded, (barely) survivor of a totally chaotic, extremely neglectful, and abusive childhood. The medications caused a lot of physical problems such as chronic pain, fatigue, and a myriad of inexplicable ailments and symptoms. In short, I was very very sick physically and psycho-spiritually.

"Because of the nature of my withdrawal, I was forced to focus on the physical aspect of my well-being for a couple of years after discontinuation. I also had a lot of neurological damage that made it difficult to wrap my head around the smallest task. My executive functioning was highly impaired. I had to first get through the fire of all the pain, which took around 2 years and then the last year has been about building from scratch. I really had no foundation of even the most basic life skills.

"Where I'm at now: Pain is very manageable through diet and meditation and my nerve pain is nearly healed. The

neurological damage was slow to heal and happened in spurts, the past 4 to 6 months I've experienced an accelerated amount of healing in that area. My confidence in my ability to heal has never wavered no matter how hard it's been. I feel like I'm doing everything in my control and I'm going to be fully recovered."

"The fundamental success markers: I follow a whole-foods, paleo diet and lifestyle. I don't use mind- or body-altering medications or substances on any level. I am able to and enjoy exercise more than I ever have in my entire life, I do some kind of exercise at least 5 days a week. I use nature and meditation practice as my "church." I started working part-time, something that I have not been able to do for 15 years. I have new friends and have strengthened my existing relationship. We (my husband and I) were in terrible debt for many years. I took a deep dive into personal finance, wrote a plan and the past 2 years, I got us out of $80 000 of debt and increased our net worth by some insane amount. Our joint financial life is very stable.

"I still struggle with self-expression. The neurological issues profoundly affected my language skills. It's been a huge struggle to put into language what I am thinking. I still have metabolism issues, or really slow motility with physical functions such as digestion, sex drive, lack of hunger and thirst, etc. I still don't feel much pleasure, can't tolerate or enjoy music much of the time, don't "get" comedy, and I don't taste food too much. This kind of sucks, but I can feel love (thank God) deeper than I ever have, so that has compensated for lack of pleasure. I think I am going to let go of or achieve these remaining issues/goals very soon.

"As hard and as incredibly painful this has been, I would not change anything about my journey, and I never want to go back to one day of my life before this."

Case 12: 38-year-old Female

LX, a 38-year-old Caucasian female, suffered from anxiety, depression, chronic candidiasis, androgen excess, and made an appointment for support with recent PD tapering from venlafaxine for her first pregnancy. Her symptoms of PD withdrawal included significant anxiety, agitation, and depression, and a possible worsening of her candidiasis symptoms. The initial therapeutic focus was on hormonal health, healing her gut lining, supporting detoxification and energy, reducing inflammation, building stress tolerance, and optimizing HPA-axis modulation. Health foundations were re-established with a gluten-free and dairy-free diet, intermittent fasting, weekly coffee enema, and daily mindfulness. Hormonal symptoms and remaining inflammation were addressed with targeted supplementation, including saw palmetto fruit (*Serenoa repens*), maca root (*Lepidium peruvianum*), curcumin and berberine, and pancreatic and thyroid glandular supplementation. Over the course of 3 months on the above regimen, she reported improved sleep, mood, energy, normalized bowel habits, and the resolution of cystic acne and muscle aches.

At her update in 2018 she recounted: "After having my second child and I was in a state of depression/exhaustion/overweight and had kept hearing from all the doctors who I went to that it was my age (I was 39) and that 'This is what happens as you get older.' I was completely dumbfounded that doctors were fine with me being overweight and depressed and the immediate solution was to give me an anti-depressant. I knew that something else was going on and wanted to get to the root of it. I was referred to Dr Brogan and she was the first to do a full deep-dive into my bloodwork and took the time to ask me a gazillion questions about how I was feeling, and she just fully understood. I also loved that she is a fighter and doesn't give up on me or ask me to just accept when I'm not feeling great."

"Overall I've had more energy, I still go through depression but I have faith in my body that I will come out of it. The gift through Dr Brogan's approach is [gaining] a confidence that I (and only me) know my body, and an extra gift is actually becomming more in-tune with what is happening and recognizing changes in my body."

INTEGRATING MODALITIES FOR BOTH GROUPS A AND B

Groups A and B described here differ according to the timing of their tapering process and added integrative support. Group A is comprised of cases in which psychotropic medication tapering was managed by Dr Brogan, and Group B is comprised of clients for whom drug tapering was managed by a practitioner or the patient themselves prior to seeing Dr Brogan. It is important to note that both psychotropic tapering and prolonged withdrawal symptoms were successfully supported using integrative modalities from similar domains: support of thyroid, sex hormone, and neurotransmitter pathways; detoxification; digestion and nutrition; activities such as exercise and mindfulness; and energetic medicine.

While botanical medicines and nutraceuticals were used as needed to individualize treatment, this case series focuses on elucidating the most consistent and powerful means of shifting mental and physical health across all participants: diet, detoxification, and mindfulness. This three-pronged approach to restoring health is both thorough and varied in its actions, thereby optimizing the impact of treatment. Prioritizing nutrition, detoxification, and meditation also meets the goal of many patients: to heal holistically according to their individual needs and capacities.

Each of the following modalities was chosen for its ability to support the body's inherent self-correcting mechanisms and highlights the interdependence between physical health and mental health.

Neuroinflammation, Mood, and the Gut-Brain Axis:

Neuroinflammation is implicated as a cause of mood disorders, evidenced by the role of inflammatory bowel diseases in the pathogenesis of depression and anxiety, and increased cytokines eliciting depressed mood.[5–7] The

following modalities have been selected for their ability to quell and reverse the inflammatory state of the body. Diet, detoxification, and mindfulness each provide a unique method of reducing neuroinflammation, thereby treating a common underlying cause of depression and anxiety, as well as fatigue, brain fog, insomnia, and many other conditions.

In addition to optimizing digestive wellness for more effective detoxification and nutrition, there are compelling reasons to optimize liver, gallbladder, and colon function for the sake of mood and cognition. The gallbladder's role in mood includes the storage and coordinated release of bile to emulsify dietary fats, which are necessary to the structure of our nervous system, including myelin sheaths and white matter of brain tissue. Furthermore, the absorption of fat-soluble vitamins A, D, E, and K, as well as nutrients EPA and DHA, relies on sufficient bile production and its appropriate release into the duodenum.

An inflamed GI tract also decreases appropriate absorption of nutrition, meaning that although a patient may be ingesting the ideal diet and supplementing their nutrition, the benefits will be limited if an underlying state of intestinal permeability and inflammation is present.

An important aspect of the gut-brain axis, though addressed indirectly in this case series, is the intestinal microbiome and its role in mood and mental health. Further research may provide an explanation of the impact of detoxification and anti-inflammatory diet on microbiota, perhaps elucidating a more thorough analysis of the efficacy of these modalities for mood.

Digestion and Nutrition

One of the most impactful changes that clients of Dr Brogan make for whole-body and mind health is to improve their diet and digestion. Elimination of suspected or confirmed food sensitivities, followed by the addition of probiotics and supporting parasympathetic tone were mainstays of protocols to regularize digestion, provide gut relief from inflammatory foods, and support the immune system through the microbiome. Vitamin and mineral supplementation (such as iron, methylated and activated B vitamins, and vitamin D_3) was also consistently used to promote stable mood by providing cofactors for neurotransmitter and hormone synthesis, as well as increasing nutritional status to allow other physical healing processes to take place.

The basis for the dietary recommendations presented in this case series is to promote a healthy gut microbiome and decrease systemic inflammation, ultimately promoting increased levels of energy, mood, and cognition. The diet aids with symptoms of withdrawal throughout the taper, as well as enhances general well-being. For this reason, the prescribed diet is continued post-taper. While the diet has many components, most importantly it is free of gluten and dairy, and it is low glycaemic.

Gluten is a protein found in wheat that increases systemic inflammation and promotes intestinal permeability (also known as leaky gut). These processes occur through the stimulation of gut and liver cells to release more Zonulin. Zonulin is a normally occurring protein synthesized by liver and intestinal cells that regulates the permeability of the intestine. It is believed that gliadin (a protein found in wheat, rye, and barley) has the effect of triggering Zonulin activity and causing increased gut permeability.[8–12] Because serotonin in the brain and retina is synthesized under the control of a circadian clock, we sought to determine if a circadian clock in the duodenum regulates serotonin synthesis and release in blood. We examined gene expression in the duodenum of chickens at different times of the day and found that the duodenum rhythmically expresses molecular circadian clock genes and genes controlling serotonin biosynthesis, specifically tryptophan hydroxylase, in a light dark cycle (LD Because of increased permeability, undigested food particles, bacteria, and other larger molecules are able to pass through the gut lining and enter the bloodstream. These foreign bodies elicit an immune response, and the inflammatory cascade that follows leads to many unwanted 'allergic' reactions such as Irritable Bowel Syndrome (IBS), chronic fatigue, migraines, eczema, and others.[7] Furthermore, a phenomenon known as *hyper-excitable celiac brain* may explain some of the neurological effects of gluten-mediated systemic inflammation. Many studies have explored cytokine activity on the blood-brain barrier (BBB) and observed that binding of these molecules increased paracellular permeability and thus disrupted the barrier.[13] Oxidative stress, such as glyco oxidative stress from a high glycemic diet or diabetes, can further this barrier break down. This notion is demonstrated in the use of antioxidant alpha-lipoic acid for repair of the BBB.[7]

In another study, researchers found gluten to play a role in mood changes for both celiac and non-celiac sensitive patients during a blinded gluten-free diet vs. placebo trial.[14] Results showed an increase in mood when gluten was eliminated from the diet. The study also noted a worsening of symptoms when non-celiac patients were introduced to gluten.

However, it should be noted that gluten can have negative consequences even for those without explicit intolerances or celiac disease. The aforementioned process of zonulin increasing gut permeability can lead to a cascading immune response in 80% of the population based on hereditary haplotypes.[12] Additionally, lipopolysaccharides (from bacterial cell walls) can enter through a permeable gut and have been linked to depression.[15] A 2014 study published in the journal *Brain, Behaviour and Immunity* concluded that there was a correlation between raised inflammatory markers and MDD.[6] This was exhibited in a trial where patients' IL-6 and IL-10 levels were lowered after an 8 week treatment period with Sertraline.[6] The inflammatory effects and mood changes associated with consuming gluten are why the prescribed diet calls for its elimination.

Dairy is another product that patients are asked to remove from their diet. While those with lactose intolerance

are faced with a clear image of the consequences of consuming dairy products, that does not mean that dairy is good for everyone else. A 2014 publication exploring the neurological and inflammatory effects of gluten and dairy suggested that symptoms could be attributed to the binding of opioid receptors by casein-derived opioid peptides found in dairy.[16] Opiates (endogenous and exogenous, like those from casein) bind Mu Opiate receptors and downregulate the expression of excitatory amino acid transporter 3 (EAAT3) on T-cells (which would normally lead to the production of cysteine). This leads to the downregulation of L-glutathione (GSH) and reduction of the methylation status of SAM/SAH, which mediates further DNA methylation.[16] Low levels of GSH have previously been associated with schizophrenic and autistic spectrum patients. These low plasma and brain GSH levels have been similarly observed in those with celiac disease.[17] These are the systemic effects of opiate binding, but on a more local level they can lead to inflammation of the gut epithelium, especially in those with casein intolerance.[16] Another aspect of the diet is a reduction in patients' glycemic load (GL). In 2015 a Women's Health Initiative analysis concluded that a higher glycemic index was a risk factor for depression.[18] Another study found that a higher GL led to a greater incidence of depression symptoms, total mood disturbance, and fatigue in comparison to a lower GL diet.[19] Specifically, the higher GL diet resulted in a 38% increase for depressive symptoms on the Center for Epidemiological Studies–Depression (CES-D) scale.

These dietary changes, along with personalized vitamin and supplement regimes, are very important aspects of the taper and continued treatment.

Detoxification

Several strategies were used to optimize clients' detoxification pathways, focusing on the enhancement of liver function, hydration, effective digestion, and elimination, as well as the function of the skin as an emunctory organ. As such, daily dry-skin brushing and coffee enemas were recommended to these patients. Dry-skin brushing increases lymph drainage, encouraging optimal circulation of functional immune cells and cytokines, and transportation of inflammatory debris for elimination. Coffee enemas promote detoxification of hormones, toxins, and other metabolites by the liver.[20]

Coffee Enemas

Coffee enemas were recommended daily in the mornings, using freshly brewed organic coffee brought to body temperature. With a few basic pieces of equipment, coffee enemas can be done at home as a 25-minute process, ideally after a morning bowel movement. The coffee is thought to stimulate the sacral parasympathetic nerve plexus in the colon, then reflexively increasing bile secretion and dilating hepatic ducts for more efficient bile flow and removal of toxicants.[21] A secondary therapeutic effect of coffee enemas is an increase to peristaltic forces for effective elimination.[22]

Coffee Enemas and Glutathione

Glutathione is a highly potent endogenous antioxidant, and is ubiquitous in healthy human tissues as L-glutathione (GSH), accounting for about 90% of the body's glutathione pool, the other 10% being the oxidized disulfide form (GSSG).[23] Coffee enemas induce the release of Glutathione S-transferases (GST),[22] the enzymes responsible for using glutathione to conjugate endogenous hormones such as estrogen, exogenous electrophile substances including many xenobiotics, and for reducing organic peroxides.[24,25] The catalyzation of GST requires palmitoleic acids, which are found in high amounts in organic coffee as diterpenes kahweol and cafestol palmitate, part of a proposed mechanism linking coffee enemas to enhanced detoxification.[22,23,26] This conjugation facilitates their removal from the body and plays a major role in cellular detoxification functions.

Sufficiently available GSH and GST are necessary to keep up with the detoxification demands of the cellular debris of inflammation, turnover of hormones, and processing and excreting environmental pollutants.[27] Chronic neuroinflammatory states, including pain, cognitive decline, sequelae of traumatic brain injuries, and many psychiatric and neurologic disorders, are correlated with GSH deficiency or depletion.[28–30]

Functional GSH deficiency has many causes. Genetic polymorphisms in the conjugating enzyme GST results in low GSH levels.[31,32] Nutrition is also crucial, as GSH production will be adversely affected by a diet insufficient in the amino acid precursors for GSH: cysteine, glycine, and glutamate. Likewise, inadequate intake of nutrient cofactors for glutathione synthetase will result in deficient GSH recycling. Finally, GSH depletion simply occurs because demand for antioxidant activity outweighs GSH supply due to excess oxidative stress, such as toxicant and xenobiotic load.

Numerous studies have confirmed the immunoregulatory roles of GST and GSH.[33] In fact, increasing the levels of these inherent antioxidant compounds has been a developing focus for the field of nutrient supplementation, be it via optimizing nutrition for the production and function of GST and GSH, or supplementing with their bioavailable forms directly. Plasma GST levels increase after one coffee enema by up to 600-700% according to the Gerson Institute.[22,34,35] More research is indicated to clarify the mechanisms of glutathione potentiation following coffee enemas.[34,36]

Meditation

The final modality of the three-pronged approach to mental vitality for these patients was a daily yogic mindfulness practice called Kirtan Kriya. Stress reduction methods including yoga and meditation have also been shown to elevate GST, the benefits of which were discussed in the detoxification section above. This is a proposed mechanism for the reduction of hypertension and oxidative stress correlated with yogic meditation.[37]

Mindfulness and meditation practices confer many physical benefits, and research is readily showing the

correlation between physical wellbeing and mental health.[38–41] In this case series, Kirtan Kriya was recommended specifically for its benefits to stress reduction, emotional resilience, and cognitive function.[42,43]

Kirtan Kriya is a kundalini yogic meditation that involves mantras (chant) and mudras (ritual movements of the fingers).[44,45] Improvement of mood, emotional regulation, memory, sleep quality, and fatigue have been shown after a daily 12-minute practice of Kirtan Kriya for 8 weeks.[46] Part of the explanation for its efficacy may lie in the chanting; rhythmic vocalizations are thought to stimulate the vagus nerve and enhance parasympathetic tone, as studies show that vagal denervation disrupts social vocalizations in bird and rat models.[47,48] Parasympathetic activation provides 'tonic vasodilatory input to cerebral arteries'[49] and, through yogic practice, has been correlated with cardiovascular markers of recovery after myocardial infarction[50] and implicated in the cardiac vagal tone differences between Type 1 diabetics and healthy controls.[51]

Kirtan Kriya offers a structured meditative practice that includes breathwork and chanting, and it can be done at home with minimal guidance. Research substantiates the impact of Kirtan Kriya and other yogic meditations on the autonomic nervous system and cerebral blood flow, suggesting physiological explanations for its role in quality of life, cognitive function, stress resilience, and other mental health markers.[43,46,48–51] Clinically, including an active meditative practice is a cornerstone of mental health recovery and maintenance.

DISCUSSION AND CONCLUSION

This case series describes 12 patients of various ages, health comorbidities, and life stressors, who are largely recovered from episodes of mental illness after tapering off of psychotropic medication. Eight clients were assisted with their PD taper under the care of this author (referred to as Group A) and four other clients (referred to as 'Group B') saw the author in a clinical setting for mood concerns after previously discontinuing psychotropic medications. These groups are distinguished by the type of oversight and tapering protocols they used to discontinue psychotropic drugs. The persistence of symptomology in Group B speaks to the duration and severity of PD withdrawal, however both groups benefited from dietary, detox, and mindfulness interventions as prescribed by the author.

The case for integrating psychological wellness with physical wellness is not new. Although broad and long-lasting wellness can be achieved with simple and effective whole-body health maintenance, these truths are not typically incorporated into conventional psychiatric treatments. Psychotropic drugs are commonly prescribed with the intention of long-term use, while research confirming their safety and efficacy for long-term use is severely lacking, and evidence to the contrary is ample. It is worth noting that patients included in this case series are now largely symptom-free, two to four years following their withdrawal phase, suggesting that long-term remission is possible even for patients who have experienced psychiatric symptoms for the majority of their adult lives.

Furthermore, changes to physical health, family structure, and other life stressors contribute to mood and should be addressed as their own 'root cause' of mental health, and their psychological consequences are often transitional and temporary. Paul Andrews, PhD, at the Virginia Institute for Psychiatric and Behavioral Genetics asserts that when it comes to mental health, "Unmedicated patients have much shorter episodes, and better long-term prospects, than medicated patients."[52] This observation has been confirmed in the clinical practice and psychiatric expertise of the main author. In addition to the recommendations listed in the modalities section of this case series, the role of therapeutic counseling for mental health concerns cannot be overstated.

Each of the individuals included in this study made significant improvements by prioritizing quantity and quality of sleep, holistically addressing the sleep disturbances that occur as a symptom of PD withdrawal. Insomnia as a result of protracted drug withdrawal could reasonably account for other psychiatric distress during the withdrawal period. Therefore, the correlation between PD withdrawal timeline, insomnia, and mood disturbances during and after PD tapering are grounds for future studies.

Future research is warranted to clarify the application and utility of holistic modalities as an appropriate first-line therapy for anxiety, depression, grief, stress, confusion and emotional processing around life transitions. Because they address the patient as a whole instead of targeting one neurotransmitter, these modalities may also prove most appropriate for cases of suboptimal physical health manifesting as changes in mood, including states of digestive and endocrine inflammation and dysfunction. The 'prescribing cascade' of treating drug side effects with additional pharmaceutical agents is common practice in psychiatric care, and is costly to the existing Western medical model, and many times sidelines patient agency and quality of life. With the holistic model described above, this prescribing cascade is minimized, if not effectively solved, and the patient remains at the helm of their wellness. Finally, the role of holistic healthcare in *preventing* psychiatric symptomatology should not be underestimated and warrants further study.

To improve future patient care, it behooves professionals in the psychiatric and psychological field to understand the interplay between a client's psychiatric and physical states of health. Thank you for reading these twelve case synopses, considering the trends they represent, and thinking critically about the assumptions and practices of conventional Western mental health care.

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