Drug Addiction

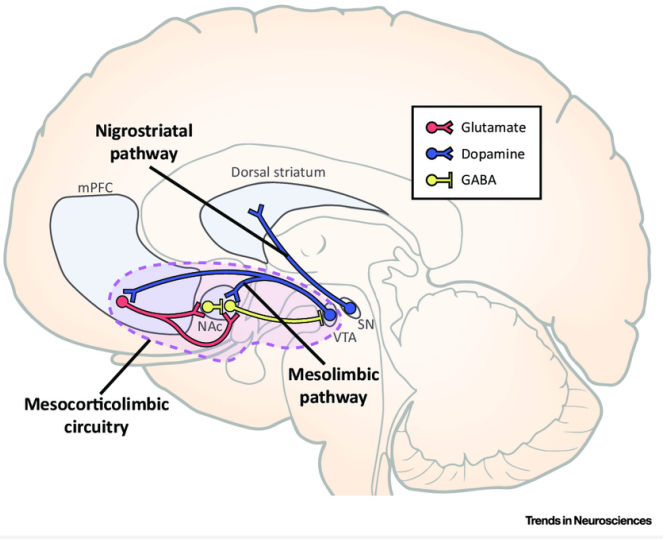
Addiction is defined as a chronic, relapsing disorder characterized by compulsive drug seeking, continued use despite harmful consequences, and long-lasting changes in the brain. It is considered both a complex brain disorder and a mental illness.

Using addictive drugs can evolve from controlled social use into the compulsive relapsing disorder that characterizes addiction. This transition to addiction results from genetic, developmental, and sociological vulnerabilities, combined with pharmacologically induced plasticity in brain circuitry. Addiction to drugs is based on pathological changes in brain function caused by repeated a pharmacological insult to the brain circuits. These brain circuits are involved in the regulation of how a person interprets and behaviorally responds to motivationally relevant stimuli. Addictive drugs strongly interact with the brain circuits and change the brain circuits that permit patients to learn about and behaviorally adapt to important environmental stimuli.[9]

Nearly all addictive drugs directly or indirectly target the brain's reward system by flooding the circuit with dopamine. When activated at normal levels, this system rewards a person's natural behaviors. Overstimulating the system with drugs, however, produces effects that strongly reinforce the behavior of drug use. Particularly in the early stages of abuse, the stimulation of the brain's reward system is a primary reason that some people take drugs repeatedly. However, the compulsion to use drugs builds overtime to extend beyond a simple drive for pleasure. This increased compulsion is related to tolerance and dependence.

The number one cause of drug craving and relapse is stress. Stress is a biological response to demanding situations and causes the body to release hormones, such as cortisol and adrenaline. The drive to use a drug to cope with excessive stress is much stronger than the drive to seek pleasure from the drug. Research indicates that there is an increased "wanting" for the drug, alcohol, or addictive activity during stressful situations—especially if the substance or activity was the person's primary coping mechanism.[1] Addicts have to use drugs to temporarily relieve stress-related symptoms that otherwise would be overwhelming and uncontrollable. Negative life events such as loss of a parent, parental divorce and conflict, low parental support, physical violence and abuse, emotional abuse and neglect, isolation and deviant affiliation, and single-parent family structure have all been associated with increased risk of substance abuse.[2]

Reinforcing properties of drugs of abuse involve their activation of the mesolimbic dopaminergic pathways. The mesolimbic dopaminergic pathways include dopamine neurons originating in the ventral tegmental area (VTA) and extending to the ventral striatum and the prefrontal cortex. This pathway is also involved in reward processing. Human brain imaging studies also support the role of these systems in drug reward. Psychostimulants, alcohol, opioids, and nicotine all activate the mesolimbic dopaminergic systems, in particular, the ventral and dorsal striatum.[2]



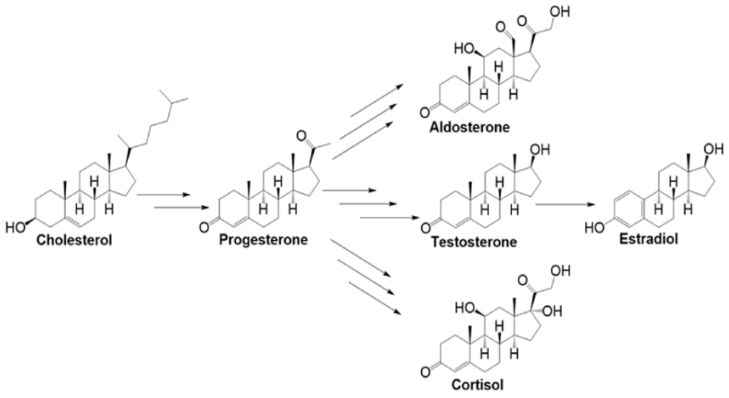
Glucocorticoid hormones including cortisol are thought to play a key role in the vulnerability to addictive behaviors, by acting on the mesolimbic reward pathway. Drugs such as opioids, raise cortisol levels which in turn raise the level of activity in the mesolimbic reward system.[4] By these mechanisms, stress can contribute to the patients desire to take drugs in the first place and to his or her subsequent compulsion to keep taking them.

The corticostriatal-limbic dopamine pathways have been associated with impulsivity, decision making, and addiction risk. Specific regions of this pathway, such as the VTA and amygdala are highly susceptible to stress-related signaling and plasticity associated with early-life stress and chronic stress experiences.[1]

The liver also plays a crucial role in the development of addictive behavior. Significant structural components of the brain including the neurons, nerves, and circuit are phospholipids, a class of lipids. They are crucial to the health of both the brain and peripheral nervous system. Brain cell membranes are rich in two phospholipids in particular: phosphatidylserine (PS) and phosphatidylcholine (PC), with PC accounting for a larger percentage. Phospholipids are synthesized by the liver. Liver damage caused by drugs use can cause compromised phospholipid synthesis. The brain may not be supplied with a sufficient number of phospholipids to repair the microscopic damage caused by the repeated pharmacological insult to the brain circuits. The resulting pathological changes in brain function leads to addiction to the drugs.

The liver produces cholesterol steroids which is the precursor of cortisol. Cortisol is then produced by the adrenal glands. Stress can cause a reduced blood flow to the liver from the hepatic artery. The liver receives one-third of its blood supply from the hepatic artery which is oxygenated blood and two-thirds of its blood supply from the hepatic portal vein which is deoxygenated blood. When blood flow from the hepatic artery is reduced, oxygen supply to the liver is greatly reduced. This can cause elevated free radical levels which cause symptoms of stress and anxiety including insomnia, headache, nausea, abdominal fullness, mood swings, or bad temper. The reduced blood supply to the liver and the resulting reduced liver function can also affect steroid synthesis. The demand for increased cortisol and the liver's decreased activities to produce the required steroid creates a gap that drives the craving for drugs under stress.

The chronic use of synthetic drugs can also cause liver damage and affect the liver's ability to synthesize needed steroids. With an increase in the use of drugs, patients can become more dependent to the drug and fall into a vicious cycle. Not all patients will become addicted after using drugs. Only a portion of people who have used a drug become addicted following the use. The United States government reported in 2008 that approximately 13 million people over the age of 12 have used methamphetamine and 529,000 of those are regular users.[10] Patients who have liver conditions such as hepatitis B and C are at a greater risk of becoming addicted once the drug has been used for the first time. While in the case of a liver deficiency, e.g. due to genetics, the addiction can gradually develop as their liver becomes further weakened as more drugs are being used.



Chronic use of addictive drugs can also cause damages to the kidney. Opioids affect the circadian rhythms of cortisol secretion, resulting in persistently raised levels of ACTH and cortisol and eventually blunting the stress response with adrenal deficiency and burnt out.[11] The cholesterol steroid that is produced by the liver serves as the precursor not only for cortisol, but also for testosterone and aldosterone. When more cortisol is needed under stress and at the same time the cholesterol steroid is undersupplied due to reduced liver function, less testosterone and aldosterone will be produced as compensation so that more cortisol can be produced. Testosterone is the key male sex hormone that regulates fertility, sex drive, and male body features. Aldosterone is a mineralocorticoid that plays a central role in the homeostatic regulation of blood pressure, plasma sodium (Na^+), and potassium (K^+) levels. Low blood levels of aldosterone can cause symptoms of fatigue and often salt-craving, "cognitive fuzziness", dizziness or lightheadedness on standing, and palpitations due to reduced blood pressure. To counter the fatigue symptoms caused by low aldosterone can further drive the use of drugs. The patient again can be trapped in another vicious cycle.

Drug Withdrawal

Drug withdrawal is a group of symptoms that occur after stopping or dramatically reducing the intake of certain drugs after heavy use for a certain period of time. These drugs include some prescription medicines, cocaine, nicotine and narcotic opiate drugs such as heroin, morphine, codeine, Oxycontin, Dilaudid, methadone, and others.

These drugs can cause physical dependence. When a person stops or reduces drug usage, the body needs time to recover, and withdrawal symptoms result. The most common drug withdrawal is opiate withdrawal with symptoms of anxiety, sweating, hot and cold flashes, sleepiness, fatigue, skin itchiness, nausea, diarrhea, muscle aches, headache and flu-like symptoms.

Drug withdrawal is a stress-like state. In clinical studies, most people report negative emotional states just before relapse, with anxiety and depression being the most common.[5] Repeated, prolonged, or severe stressors often precede the development of anxiety disorders, depression, and substance abuse.

Long term heavy use of addictive drugs can cause liver and kidney damage. Severe liver and adrenal deficiency are the main cause of withdrawal symptoms. Many opiate drugs also contain acetaminophen (e.g. Vicodin and Percocet). Taking large doses of acetaminophen or chronic use of acetaminophen can cause liver damage. The use of opiate drugs can also result in kidney damages. Long-term use of acetaminophen can also produce analgesic neuropathy, an irreversible condition that can progress to renal failure, or chronic kidney failure. Cocaine has significant detrimental effects on kidney function. Nearly one-third of individuals who are admitted to emergency rooms with cocaine-related issues will also develop acute kidney failure.

Wellness Recommendation

The wellness recommendation for drug addiction and withdrawal includes Brown and LC Balancer. Brown nurtures liver Yin. Brown helps improve overall liver health and repair liver damage to help the liver provide needed phospholipids to repair the damage in the brain circuit. Improved liver health also helps patients better handle stress with the prompt supply of cholesterol steroids. Goji berry, an ingredient in Brown, has been shown to improve traumatic cognition by reversing the imbalance of apoptosis/regeneration in hippocampal neurons following stress.[6] Herbal ingredients in Brown have also been shown to decrease depression-like behavior through stimulating dendritic patterns in the hippocampus, increasing levels of serotonin, and increasing energy metabolism. This is important in order to combat relapse in which depression is a common emotional state before relapse occurs.[7] LC Balancer nurtures kidney Yin. LC Balancer helps enhance microcirculation by improving microcapillary structure which improves overall blood flow and nutrient absorption. American ginseng, one of the main ingredients in LC Balancer, has been shown to have many effects on the nervous system including increasing hippocampal excitability which helps reverse impairment from stress. It also helps to mitigate the anxiety caused by drug abuse to help prevent patients from relapsing.[8] The use of Brown and LC Balancer help patients better handle stress and therefore, can be a significant benefit in the recovery process.

After 1-2 weeks with Brown and LC Balancer under a drug-free condition, the patient should experience a noticeable decrease of anxiety and uncontrollable urges to use the drug and reduction of the withdrawal stress and anxiety symptoms as well as improvement in general well-being and overall health.

Within 6 weeks, the patient's withdrawal symptoms should be significantly reduced. A minimum of a three-month protocol is recommended. Improved liver health will help increase stress tolerance and help eliminate the needs for addictive drugs under stress.

It is also recommended to take the following blood tests before and every month following the start of the protocol to measure the improvement of liver health:

1) Hepatic function panel: determine blood level of Albumin, Bilirubin, Alkaline phosphate transferase (ALP), Aspartate amino transferase (AST), Alanine amino transferase (ALT), and total protein.
2) Lipoprotein analysis (lipoprotein profile or lipid profile): measure the blood levels of total cholesterol, LDL cholesterol, HDL cholesterol, and triglycerides

Patients can experience symptom reduction quickly but it will take a longer time for the blood test to show improvement. The patient should continue the protocol until the blood test results are normal even if all symptoms have been cleared. This process may take 6 weeks to 3 months and can be longer for very severe cases. If patients stop the protocol before all parameters of the blood test become normal, they may have a premature relapse.

For patients who have a liver deficiency due to genetics, their withdrawal symptoms may build up again gradually over time and will need the protocol for 1 to 2 weeks periodically e.g. every 6 weeks to 3 months. As an alternative, the patient can take a low preventative dose.

Adrenal and Kidney Deficiency

Patients with adrenal and/or kidney deficiency may have slow improvement and require Xcel which enhances kidney Yang and adrenal gland function to help the kidneys filter out the waste promptly.

Low Blood Pressure

Patients with low blood pressure may require Qi Booster which enhances Qi and resolves low blood pressure and related symptoms.

Selected Case Studies

Case 1: Methamphetamine Addiction Eliminated with Brown Formula and LC Balancer

Jeannette de Langis, RN, Malibu, California

A forty-one-year-old male Methamphetamine addict who used over a span of fifteen years experienced remarkable changes on Chinese herbs, specifically Wei Laboratories Brown and LC Balancer. Within two weeks of using the Wei Laboratories products, he reported that he had a better sense of wellbeing and overall health.

Within two months, he reported that his anxiety and uncontrollable urges had diminished greatly. He was now able to speak about issues in his life with calm and reasonable thought processes. The changes he reported and observed by myself were quite astounding.

Case 2: Detox of Methamphetamine User with Brown Formula and LC Balancer

Susan Naversen, AP, Director of Alternative Medicine, P.T.A. Care, Inc., North Palm Beach, Florida

The patient is a 28-year-old Methamphetamine user who has used Crystal Meth at least 5 times daily for a period of eleven months. She is additionally a crack cocaine user. Upon arrival she had not slept for 48 hours and was experiencing sweats, feeling cold, fever, and extreme exhaustion.

She was started immediately on a course of Brown and LC Balancer. Within 24 hours she reported no symptoms of withdrawal. She also reported that she has never been able to detox with so little symptoms. She was able to participate fully in our intense program within 24 hours. She finished the course of treatment and stayed symptom free for approximately 3 days. At that time, she began to feel “angry” and “snappish”. She took another course of both Brown and LC Balancer. This patient has done remarkably well in her treatment and credits these products with making her journey to recovery much easier. She is currently planning her discharge.

Case 3: Successful Treatment of Drug Withdrawal Symptoms and Depression

Rebecca Burton, DC, OK

A female patient, 44 years of age, pursued treatment with Dr. Burton for her severe drug withdrawals consisting of fibromyalgia, depression, anxiety, chest pain, and compulsive thoughts as well as social and physical inactivity. The patient noticed she was becoming more of a hermit and no longer cared to go out in public and enjoy things she previously loved to do.

Dr. Rebecca Burton recommended a protocol to support the liver, kidneys, and brain. The patient started with a regimen of LC Balancer for kidney structural support, Platinum to clear inflammation within the brain, Hepavin to

remove Heat from the liver, Pacekeeping and Millennium to improve heart structure and heartbeat, and Brown ~~Juice~~ to support liver function.

After the first phase of treatment the patient noticed a great improvement; her depression had improved, her appetite had increased, and she now was repairing her social and physical lifestyle. She has re-joined old friend circles and has started resuming her normal life activities. This patient is now pursuing Phase II of the treatment plan.

Case 4: Successful Resolution of Klonopin Drug Withdrawal
John Zeravich, DC, CA

A 51-year-old female patient was on 3 mg of Klonopin (a Benzodiazepine drug) and had trouble weaning off the medication without severe drug withdrawal symptoms. She had grown a dependence on the drug and weaning off had left her with symptoms of mood swings, anxiousness, fear, nervousness, easily stressed, insomnia, night sweats and depression.

The patient looked for a natural remedy to allow her to wean off the Klonopin without experiencing such severe withdrawal symptoms. She began an herbal regimen from Wei Laboratories consisting of Xcel, LC Balancer, and Qi Booster.

After 2 weeks of treatment, her results were great. Her symptoms of mood swings, anxiety and depression have all improved and her dosage of Klonopin has been decreased without major complications. She plans to begin Brown and now is down to 1 mg of Klonopin a day.

Case 5: Cocaine and Cigarette Addicts Treated with Brown Formula and LC Balancer
Patient from Santa Clara, California

My mother is a cocaine addict of several years. I started my mom with a two-week protocol of the Brown and LC Balancer from Wei Labs. Two weeks later, I actually managed to have a normal phone conversation with her for the first time in a while. I also found out that my mom managed to gain seven to eight pounds along with stopping any drug abuse.

I myself am a cigarette smoker of many years and I tried to quit with no success. However, after taking the Brown and LC Balancer for two weeks, I felt a lot calmer and better about my health. Prior to my treatment, I used to smoke more than pack a day. Now, I've managed to reduce that to six or seven cigarettes per day, a definite improvement.

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