

## Buprenorphine: New Hope for Opioid Addicts

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For most of the last century, the ability of doctors and treatment centers to help opioid addicts has been limited by federal law. The Harrison Narcotic Act of 1914, originally designed as a tax act, was interpreted by the Supreme Court to prohibit the prescription of opioids to opioid addicts, even in the course of their treatment. From then on, an entire line of practice - the tapering of opioid dosage to ease the pain of withdrawal and opioid substitution as maintenance therapy - was against the law.

One exception was methadone. When used properly, methadone maintenance is the most effective treatment for opioid addiction - if you measure "effective" by psychosocial stability, decreased HIV and Hepatitis B/C seroconversion risk, and decreased criminal recidivism. Once a patient reaches a sufficient and stabilized dose of methadone, the patient is comfortable (no cravings), the methadone blocks the effects of other opioids like heroin (so there is no need to use illicit drugs), and the patient can obtain employment, housing and health care. Unfortunately, hostility to the idea of maintaining addicts on a substitute drug has led to federal restriction of methadone that is so tight that the drug can only be prescribed by specific clinics. These clinics vary widely in the quality of care they provide. Additionally, the beneficial effects of methadone are only seen in doses higher than 80mg/day. The average daily dose given to methadone addicts in the United States is only 40mg/day. At this dose, the patient does not obtain the benefit of the drug and is likely to make up the dosage difference with heroin, risking arrest, infection and continued acceleration of their addiction. As a detox medication, methadone is limited due to the extreme discomfort the addict experiences at the end of the taper - as the last part few milligrams are withdrawn. These factors have limited methadone's effectiveness as a medication not only for maintenance, but for detoxification as well.

In the latter part of the twentieth century, the medical management of opioid withdrawal was largely left to treatment centers, where physicians who did not use methadone could prescribe only a handful of symptomatic medications. Opioid addicts who could not afford medical treatment are left to detoxify themselves "cold turkey," which usually results in a return to opioid drug use.

But now there is hope on the horizon. The Drug Abuse Treatment Act of 2000 allows the prescription of buprenorphine to opioid addicts to ease the symptoms of withdrawal. Whereas drugs like morphine, heroin and methadone are opioid receptor agonists - meaning they fully bind opioid receptors - buprenorphine is a *partial* opioid receptor agonist. This gives buprenorphine the ability to relieve the symptoms of opioid withdrawal without producing the euphoria of the full agonist drugs like methadone. For the first time, physicians can use buprenorphine to provide a comfortable detox for opioid addicted patients or provide buprenorphine substitution therapy, thereby setting the stage for more effective inpatient or outpatient treatment.

Buprenorphine is commercially available in two forms: a sublingually (under the tongue) administered tablet containing only buprenorphine (Subutex®, manufactured by Reckitt-Benkiser), and a sublingually administered tablet containing buprenorphine and the opioid antagonist (blocker) naloxone (Suboxone®). Suboxone® eliminates the danger of abuse of the opioid component of the medication: administered sublingually,

only the buprenorphine is absorbed, but if the patient attempts to inject Suboxone®, the opioid antagonist blocks the effect of the buprenorphine.

But perhaps the most important feature of the Drug Abuse Treatment Act and the availability of Subutex® and Suboxone®, is that it gives the ability of physicians to treat addicts in the privacy of their office. Patients no longer need to travel to substandard clinics to receive help for their addiction. As mandated by the DATA, physicians wishing to prescribe buprenorphine must complete the instructional course on the protocol for Office-based Opioid Treatment (OBOT) given by the Center for Substance Abuse Treatment. A nationwide listing of physicians certified to prescribe buprenorphine can be found at [www.buprenorphine.samhsa.gov](http://www.buprenorphine.samhsa.gov).

Buprenorphine has been available for about one year. The results have been staggeringly positive. In the past, many opioid addicts attempting to achieve sobriety by the old methods (medical detox or "cold turkey") failed to complete their detoxification. Now those patients are completing detox and entering treatment. Patients prescribed Suboxone are reporting that for the first time they feel some hope.