

Oxycodone (OxyContin)

Profile

Oxycodone is a semi-synthetic opiate manufactured by modifying the chemical thebaine, an organic chemical found in opium.¹ It is the active ingredient in a number of commonly prescribed pain relief medications such as Percocet, Percodan, and Tylox. Each of these contains oxycodone in small doses combined with other active ingredients like aspirin.² OxyContin, another prescription form of oxycodone, is available in doses ranging in strength from 10mg to 80mg tablets. Intended use of OxyContin is for long-term relief (up to 12 hours) of moderate to severe pain associated with conditions such as cancer and arthritis.³ A unique property of OxyContin is that the tablets are time released; that is, the effects of the drug and its analgesic properties take effect over a set period of time rather than all at once. It is similar to codeine and methadone in its analgesic (pain-killing) properties⁴. Currently, oxycodone products, and all of the medications containing it, are Schedule II controlled substances. OxyContin, which may be the most recognized form of oxycodone, is a drug with a high abuse potential, and in the past few years it has been linked to a number of overdose deaths.⁵ As of November 1, 2001, medical examiner offices in 31 states reported 1,096 overdose deaths involving oxycodone; 117 of these deaths were related to OxyContin.⁶ The use of OxyContin and oxycodone products also continues to increase, and though nobody knows exactly how many people are abusing them, a research study in 2000 found that more than 8% of teenagers reported having abused pain relievers at least once in their lifetime.⁷ Use is not limited to adolescents and teenagers; every age group has been affected by illicit use of oxycodone and its perceived safety. Sometimes seen as a "white collar" addiction, oxycodone abuse has increased among all ethnic and economic backgrounds.⁸ OxyContin can be rather expensive. A 40mg tablet (prescribed from a doctor) costs approximately \$4, but the street value (the cost when illegally obtaining the drug) can range in price from \$25 to \$40.⁹

History

The potential dangers of oxycodone can be traced as far back as the 1960's when the United Nations Office on Drugs and Crime classified it as a dangerous drug as part of *The Dangerous Drugs (Amendment) Ordinance, 1960*.¹⁰ Abuse in the United States has been a continuing problem since the early 1960's, prompting the United States Government to classify it as a Schedule II drug. Until 1995, when the Food and Drug Administration approved OxyContin, there was little concern over the abuse of oxycodone products. However, in 1996 when the manufacturer of OxyContin began to market and distribute the drug, concerns and reports of illicit use and abuse began to increase.¹¹ At first, drug abuse treatment centers, law enforcement personnel, and pharmacists in Maine, Virginia, West Virginia, Ohio, Kentucky, and Maryland reported increases in the abuse of OxyContin. Now, abuse of the drug has expanded throughout the United States.¹²

Methods of Use

Oxycodone products can be administered intramuscularly (injection directly into the muscle), intravenously (injection into the blood stream), subcutaneously (injection under the skin), rectally, and/or orally through pills and tablets.¹³ OxyContin, taken orally (in tablet form), can remain effective for up to 12 hours, making it the longest acting oxycodone product available. While legal doses vary by patient, a typical dose prescribed by a physician ranges from two to four tablets daily. Currently there are four dosages available - 10, 20, 40, and 80mg tablets. The 160mg tablet (available in 2000) was suspended in May 2001 due to its severe abuse potential.¹⁴ Those who abuse the drug generally do so in three different ways: crushing the pill into a fine powder and snorting it; chewing it; or crushing and dissolving the tablets in water and injecting the solution. Many of these methods are primarily used with OxyContin in order to defeat the time-release mechanism of the drug, causing the active ingredient to take effect almost immediately after ingestion. When using OxyContin this way, the risk of an overdose increases dramatically since the drug is not intended to be used in this manner. Some users also mix the drug with alcohol to achieve an even greater high¹⁵, even though it can be a fatal combination.

Pharmacology

The chemical structure of oxycodone is similar to another pain reliever - codeine - and is almost as potent as morphine in its ability to produce opiate-like effects.¹⁶ Oxycodone works by binding to the pain receptors in the brain so that the sensation of pain is reduced.¹⁷ In other words, it attempts to change pain messages being sent to the brain so the user will be relieved of moderate to severe or chronic pain linked to such conditions as cancer and arthritis. Illicit users ingest the drug for a number of reasons. Some use it to control withdrawal symptoms of heroin or morphine¹⁸, while others use and/or abuse the drug only in an attempt to achieve a euphoric high.

Effects

When using oxycodone products, including OxyContin, under the care of a physician, most users will experience mild side effects. Like many other narcotic medications, oxycodone can impair certain daily activities, such as driving and other mental and physical abilities. These side effects are usually mild, but there are more serious complications and negative effects from using products containing oxycodone, particularly when abused.

Side effects of oxycodone products include:

- Breathing irregularity or respiratory depression
- Increased pressure of cerebral and spinal fluid
- Headaches
- Nausea
- Dizziness

- Seizures
- Heart failure
- Low blood pressure
- Overdose death due to cardiac arrest or slowed breathing (especially when ingesting crushed OxyContin tablets)

Addiction and Withdrawal

Since oxycodone products should only be used based on a doctor's prescription, signs of addiction can be monitored and controlled more effectively than if the user is not under a physician's care. When used illicitly, the chances of becoming addicted to it increase exponentially. Oxycodone, for example, has many similarities to other drugs of abuse including alcohol, heroin, and marijuana, in that they elevate levels of dopamine, the neurotransmitter linked with pleasure experiences. As a result, prolonged use and abuse of oxycodone medications eventually change the brain in such a way that a user cannot quit on his or her own, a typical sign of addiction.¹⁹ The likelihood of experiencing withdrawal symptoms when using prescription opioids (e.g., oxycodone) is extremely high, especially when the user stops suddenly. Withdrawal symptoms may be severe and can include anxiety, nausea, insomnia, muscle pain, fevers, and other flu like symptoms.

Street Terms

- Slang Terms for Percodan and Percocet
Percodoms, Percs
- Slang Terms for OxyContin
Oxy, O.C.'s, Oxycet, Oxycottons, Oxy 80's, Hillbilly Heroin, Killers
- OxyContin Use:
Jammed - under the influence of OxyContin

Links

- [American Council for Drug Education: Oxycontin](#)
- [ONDCP: OxyContin](#)

¹ Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA). (2001). *OxyContin Situation Report, 2001*.

² Drug Enforcement Administration. March 2002. *Drug Intelligence Brief: OxyContin*. Retrieved October 27, 2006, from <http://www.avitarinc.com/pdf/Drug-Intelligence-Brief-Oxycotone-Facts.pdf>.

³ Drug Enforcement Administration. March 2002.

⁴ Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA). (2001).

⁵ Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA). (2001).

-
- ⁶ Office of National Drug Control Policy (ONDCP). OxyContin. Retrieved October 27, 2006, from <http://www.whitehousedrugpolicy.gov/drugfact/oxycontin/index.html>.
- ⁷ Substance Abuse and Mental Health Services Administration. (2002). State Estimates of Substance Abuse from the 2000 National Household Survey on Drug Abuse. Department of Health and Human Services: Washington, D.C.
- ⁸ Drug Enforcement Administration, Diversion Control Program. 2001. "OxyContin Special." *DEA-Industry Communicator*. Retrieved October 27, 2006, from http://www.deadiversion.usdoj.gov/pubs/nwsltr/spec2001/oxy_spec.pdf.
- ⁹ U.S. Department of Justice Drug Intelligence Center. January 2001. *Information Bulletin: OxyContin Diversion and Abuse*.
- ¹⁰ United Nations Office on Drugs and Crime. Legal Library Document: 1961-01-27_1960-121. Retrieved October 27, 2006, from http://www.undcp.org/odccp/legal_library/gm/legal_library_1961-01-27_1960-121.html.
- ¹¹ Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA). (2001).
- ¹² Drug Enforcement Administration, Diversion Control Program. 2001.
- ¹³ Poyhia, R., Vainio, A., and Kalso, E. (1993). "A Review of Oxycodone's Clinical Pharmacokinetics and Pharmacodynamics." *Journal of Pain and Symptom Management* 8:63-7
- ¹⁴ Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA). (2001).
- ¹⁵ Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA). (2001).
- ¹⁶ MedicineNet. Oxycodone and Acetaminophen. Retrieved October 27, 2006, from http://www.medicinenet.com/oxycodone_and_acetaminophen/article.htm.
- ¹⁷ Dr. Waismann Clinic – Opiate Dependency Treatment Center. Opiate Library. Retrieved October 27, 2006, from http://www.anrclinic.info/en/main/Opiate_Library/.
- ¹⁸ Drug Enforcement Administration, Diversion Control Program. 2001.
- ¹⁹ Hanson, G.R. (2002). "Hearing before the Health, Education, Labor, and Pensions Committee United States Senate – 'OxyContin: Balancing Risks and Benefits'." Retrieved October 27, 2006, from <http://www.drugabuse.gov/Testimony/2-12-02Testimony.html>.