



Oxycodone and Oxymorphone - General Effects

Oxycodone (Oxycontin, Percocet, Percodan) and **Oxymorphone** (Opana) are narcotic analgesics and central nervous system (CNS) depressants.

1. Oxycodone is used for the relief of moderate to severe pain.
 - a. Oxycodone has a half-life of 3-6 hours.
 - b. Oxycodone has a general therapeutic range, but experienced effects can vary based on an individual's prescription history.
 - i. Therapeutic range refers to the blood concentration expected to achieve the desired therapeutic effects. Due to many factors such as prescription history, dosage, tolerance, drug-drug interactions and use, an individual may exhibit signs of impairment even though blood concentrations fall within the therapeutic range.
2. Oxymorphone (Opana) is used for the relief of moderate to severe pain.
 - a. Oxymorphone has a half-life of 4-12 hours.
 - b. Oxymorphone has a general therapeutic range, but experienced effects can vary based on an individual's prescription history.
 - c. Oxymorphone can be prescribed on its own or it can be detected as an active metabolite of oxycodone.
3. General effects of narcotic analgesics include but are not limited to: nausea, vomiting, respiratory depression, sedation, and mental clouding/mood swings.
 - a. General impairing effects of narcotic analgesics on driving include, but are not limited to: impaired divided attention, poor coordination, cognitive impairment, delayed reaction time, difficulty following direction, and falling asleep at the wheel.
4. The longer an individual uses a drug, the more they can build up a tolerance to its effects. Tolerance occurs when an individual no longer responds to the drug in the way that they initially responded. When an individual gains tolerance to a drug, a higher dose of the drug is necessary to achieve the same level or response initially achieved. As tolerance is gained, it may reduce some of the possible negative effects of a drug.
5. Drug metabolism (alcohol excluded) exhibits first order kinetics, or the elimination of a constant fraction of drug quantity per unit of time, which means that the amount eliminated is proportional to the drug concentration.
6. The use of more than one drug at a time may enhance the effects the drugs would otherwise have on their own, leading to greater impairment.

References

1. Baselt, R.C. (2020). Disposition of toxic drugs and chemicals in man. Biomedical Publications, Seal Beach, CA.
2. Baselt, R.C. (2001). Drug effects on psychomotor performance. Biomedical Publications, Foster City, CA.
3. Moffat, A. C., Osselton, M. D., Widdop, B., & Watts, J. (2011). Clarke's analysis of drugs and poisons (3rd ed., Vol. 1). Pharmaceutical Press.
4. Levine, B., & Vina Spiehler. (2020). Pharmacokinetics and Pharmacodynamics. In B. Levine (Ed.), Principles of Forensic Toxicology (4th ed., pp. 77-93). essay, AACC Press.

Template and general factual statements used from Colorado Bureau of Investigation's monograph system. Edits and fact checking performed by Wisconsin State Crime Laboratory prior to publication.

** The interpretive information provided is not exhaustive nor meant to encompass all scenarios where toxicological results are reported. Interpretive information is meant to serve as a general guide for the reader and that for any given case, consultation with a forensic toxicologist is recommended. **

— Oxycodone & Oxymorphone Monograph				
Document ID	Revision	Effective Date	Status	Page Number
48561	1	10/29/2024 6:50:26 AM	Published	1 of 1