Cigna Medical Coverage Policy

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Coverage Policy Number **0384**

Subject **Ultra-Rapid Detoxification**

Table of Contents

Hyperlink to Related Coverage Policies

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Coverage Policy

Cigna does not cover opioid antagonist agent detoxification under sedation or general anesthesia (e.g., ultra-rapid detoxification) as a method for opioid detoxification because it is considered experimental, investigational or unproven.

General Background

Current treatment approaches to opioid withdrawal are: abstinence-based, opiate replacement withdrawal, and clonidine treatment. It is not clear which of these approaches has the best success rate in terms of eventual abstinence (Moore and Jefferson, 2004).

Managing withdrawal is critical to the success of treatment with opioid-dependent patients. Some opioid-dependent patients often terminate the detoxification process due to the significant amount of discomfort during the withdrawal process; therefore, accelerated methods of opioid detoxification that rapidly induce withdrawal have been proposed using general anesthesia or sedation. These methods usually achieve detoxification from opiates within 24–48 hours. Synonyms for anesthesia-assisted detoxification are ultra-rapid opiate detoxification (UROD), anesthesia-assisted opiate detoxification, rapid opiate detoxification under anesthesia (RODA) and opioid antagonist detoxification under sedation or anesthesia (OADUSA) (preferred terminology of the American Society of Addiction Medicine [ASAM]). The common underlying themes in all the programs of UROD are the following: to shorten the detoxification process to a 6–8 hour period by precipitating withdrawal following the administration of opioid antagonists under general anesthesia; to blunt the awareness of physical discomfort by deep sedation or anesthesia, and to shorten the time lag between a patient's last dose of opioid and his transfer (induction) onto naltrexone maintenance. The procedure of rapid detoxification requires an intensive medical care unit (for administration of anesthesia/deep sedation and monitoring), which should be preferably closely

connected with the psychiatry or addiction unit to facilitate continuity of care. It is recommended that he team carrying out the procedure should have an anesthetist, a specialist in intensive medicine, a psychiatrist, nursing staff and a psychotherapist/counselor. This would ensure attention to the procedure, the immediate post-procedure complications as well as later abstinence-oriented programs. Although details differ among programs, in most cases patients are given clonidine and an anti-emetic and then either sedated with a benzodiazepine or anesthetized with propofol or midazolam. Naloxone and naltrexone are given, and the potentially dysphoric withdrawal is thus precipitated while the patient is more or less unconscious. Consciousness is then allowed to return, and patients are continued on naltrexone and, temporarily, also on clonidine and an anti-emetic. It is not clear whether these techniques increase the likelihood of abstinence or whether any reports of successes outweigh the risks of general anesthesia (Renner, et al., 2008; Eisendrath and Lichtmacher, 2005; Moore and Jefferson, 2004; Singh and Basu, 2004; ASAM, 2005).

Data are limited on the impact of opioid dependence and the comorbid problems commonly seen in opioid-dependent patients (e.g., cocaine use and human immunodeficiency syndrome) on anesthesia risk. Respiratory distress, cardiovascular and renal complications and deaths have been reported with ultra-rapid detoxification. Heavy sedation without intubation carries the risk of vomiting with aspiration and sedative overdose. When the patient comes out of anesthesia or sedation, they often continue to experience psychological needs or cravings, leading to preoccupation with using opioid drugs. The opioid receptor sensitivity is altered during detoxification, and the degree of tolerance to the drug is lost after detoxification. Overdose and death can result if the patient resumes opioid use at the same high doses prior to detoxification (Wax and Ruha, 2011; Gowing, et al., 2010; Gold, et al., 1999; Dyer, 1998).

Literature Review

In a randomized trial, Favrat et al. (2006) compared rapid opiate detoxification under anesthesia (RODA) to clonidine detoxification with follow-up at three, six and 12 months. Additionally, one week of inpatient psychosocial support for both procedures was included after treatment. The study included opiate-dependent patients over age 18 years. Of the 113 eligible patients, 70 participated and were randomized—36 to the rapid anesthesia-assisted procedure and 34 to the clonidine group. Forty-three patients refused to participate but agreed to follow-up. Twenty-one patients who declined to take part in the study were enrolled in the standard carbamazepine-mianserin inpatient program offered by the substance abuse clinic. Twenty-two patients did not receive the allocated intervention due to a positive urine test or they did not attend treatment. After randomization, 23 patients withdrew from the trial procedure either because they did not attend on the day of the procedure or because of a positive urine test result for non-opiate substances just before the procedure. Therefore, the study included 26 patients in the anesthesia group and 21 in the clonidine group. The authors reported no complications during or after anesthesia. Seventy-eight percent of the RODA patients and 62% of the clonidine group successfully completed the detoxification process. After three months, 30% of the RODA patients were abstinent compared to 14% in the clonidine group. The authors reported no differences between the two groups at six and 12 months. At 12 months, all patients except one had relapsed in both groups. Fourteen and 18 of the RODA patients were lost to follow-up at six and 18 months, respectively. Two, 15 and 19 of the clonidine-treated patients were lost to follow-up at three, six and 12 months, respectively. The authors reported, “Although the detoxification success rate and abstinence after three months were slightly better for the RODA procedure compared to the clonidine treatment, these differences were not statistically significant and disappeared completed after six and 12 months.”

Collins et al. (2005) studied how anesthesia-assisted detoxification with rapid antagonist induction for heroin dependence compared with two alternative detoxification and antagonist induction methods. A total of 106 heroin-dependent patients were randomly assigned to one of three inpatient withdrawal treatments over 72 hours, followed by 12 weeks of outpatient naltrexone maintenance with relapse prevention psychotherapy. The treatments included anesthesia-assisted rapid opioid detoxification with naltrexone, buprenophine-assisted rapid opioid detoxification with naltrexone induction, and clonidine-assisted opioid detoxification with delayed naltrexone induction. Mean withdrawal severities and treatment retention over 12 weeks was similar among the three treatments. By week three, more than 50% of the patients had dropped out of each treatment group. The anesthesia procedure was associated with three potentially life-threatening adverse events, including: severe pulmonary edema and aspiration pneumonia 14 hours after extubation; suicidal ideation about five days after anesthesia in a patient with a mixed bipolar state; and one patient with insulin-dependent diabetes mellitus developed diabetic ketoacidosis after discharge. The authors reported that general anesthesia for rapid antagonist induction does not have a role in the treatment of opioid dependence. The greater safety and equivalent withdrawal severity profile of the buprenorphine-mediated procedure is preferable to anesthesia.

In a randomized, controlled open trial, DeJong et al. (2005) studied whether rapid detoxification under general anesthesia results in higher levels of opioid abstinence than detoxification without anesthesia. The study included 272 opioid-dependent patients who failed previous attempts at abstinence. In all the patients, detoxification was induced by administering an opioid antagonist (i.e., naltrexone). One month after treatment, 62.8% of the patients in the rapid detoxification with general anesthesia group and 60% in the detoxification without anesthesia group were abstinent from opioids. No adverse events occurred in the detoxification without anesthesia group. Five adverse events occurred in the rapid detoxification with general anesthesia group which required admission to the hospital. The study did not find that withdrawal symptoms were less severe in the patients treated under general anesthesia. The authors reported that since the method of rapid detoxification under general anesthesia resulted in a number of severe adverse events, this treatment should not be used in detoxification guidelines.

Krabbe et al. (2003) conducted a prospective study (n=30) of abstinence rates and withdrawal effects of rapid detoxification of opioid-dependents under general anesthesia (RD-GA) compared to standard methadone tapering. They used a follow-up of three months. The authors stated, “Objective and subjective withdrawal symptoms showed largely identical outcomes and were equally low in the two groups for those who remained in the study. There was a considerably higher percentage of abstinence in the RD-GA group after one, two and three months of follow-up accomplished by relatively mild withdrawl symptoms of shorter duration. However, if one completes standard methadone tapering, the data suggested a greater chance of staying clean in the long term than those completing RD-GA.”

In an updated Cochrane review of the scientific literature, Gowing et al. (2010) assessed the effectiveness of interventions involving the administration of opioid antagonists (i.e., naloxone, naltrexone, nalmefene) to induce opioid withdrawal with heavy sedation or anesthesia, in terms of withdrawal signs and symptoms, completion of treatment and adverse effects. Adverse events were defined as clinically significant signs and symptoms of opioid withdrawal (e.g., vomiting and diarrhea) plus any incidents that are not typical components of opioid withdrawal syndrome (e.g., delirium or hypertension). Selection criteria for the studies included controlled trials comparing antagonist-induced withdrawal under heavy sedation or anesthesia with another form of treatment, or a different regimen of anesthesia-based antagonist-induced withdrawal. Nine studies (eight randomized controlled trials) involving 1109 participants met the inclusion criteria for the review. The authors reported that antagonist-induced withdrawal is more intense but less prolonged than withdrawal managed with reducing doses of methadone, and doses of naltrexone sufficient for blockade of opioid effects can be established significantly and more quickly with antagonist-induced withdrawal than withdrawal managed with clonidine and symptomatic medications. The level of sedation does not affect the intensity and duration of withdrawal, although the duration of anesthesia may influence withdrawal severity. There is a significantly greater risk of adverse events with heavy, compared to light, sedation and probably also other forms of detoxification. The authors reported that due to the increased risk of clinically significant adverse events associated with withdrawal under heavy sedation or anesthesia, the value of anesthesia-assisted antagonist-induced withdrawal is questionable.

Gowing et al. (2009) conducted an updated Cochrane review assessing the effectiveness of opioid antagonists in combination with minimal sedation to induce withdrawal, in terms of intensity of withdrawal, adverse effects and completion of treatment. Nine studies (six randomized controlled trials), involving 837participants, met the inclusion criteria for the review. The authors reported that withdrawal induced by opioid antagonists in combination with an adrenergic agonist is more intense than withdrawal managed with clonidine or lofexidine alone, but the overall severity is less. Limited data showed that antagonist-induced withdrawal may be more severe when the last opioid used was methadone rather than heroin or another short-acting opioid. Delirium may occur following the first dose of opioid antagonist, particularly with higher doses. The studies included suggest there is no significant difference in rates of completion of treatment for withdrawal induced by opioid antagonists, in combination with an adrenergic agonist, compared with adrenergic agonist alone. The authors reported that “the use of opioid antagonists combined with alpha2 adrenergic agonists is a feasible approach to the management of opioid withdrawal. However, it is unclear whether this approach reduces the duration of withdrawal or facilitates transfer to naltrexone treatment to a greater extent than withdrawal managed primarily with an adrenergic agonist. A high level of monitoring and support is desirable for several hours following administration of opioid antagonists because of the possibility of vomiting, diarrhea and delirium. Further research is required to confirm the relative effectiveness of antagonist-induced regimes, as well as variables

influencing the severity of withdrawal, adverse effects, the most effective antagonist-based treatment regime, and approaches that might increase retention in subsequent naltrexone maintenance treatment."

Professional Societies/Organizations
In 2013, the Washington State Department of Labor and Industries published a guideline for prescribing opioids to treat pain in injured workers. The guideline addresses discontinuing opioids in an intensive setting and concluded that "due to the lack of high quality evidence of safety and comparative efficacy, ultra rapid detoxification (e.g. within three days), using antagonist drugs with or without sedation, will not be covered."

In 2006, the Center for Substance Abuse Treatment (CSAT) published a treatment improvement protocol on physical detoxification services for withdrawal from specific substances. The guideline states: "Although there are few data showing that the rapid or ultra-rapid methods of opioid detoxification show a positive correlation with the likelihood of a patient's being abstinent a few months later, efforts persist to make the detoxification process shorter and easier." There has been no update to this protocol since 2006.

In 2000, the American Society of Addiction Medicine, Inc. (ASAM) published a public policy statement regarding opiate detoxification under sedation or anesthesia. This policy statement enumerated a number of positions, with the following two most relevant to this discussion: "Ultra-Rapid Opioid Detoxification (UROD) is a procedure with uncertain risks and benefits, and its use in clinical settings is not supportable until a clearly positive risk-benefit relationship can be demonstrated. Further research on UROD should be conducted. Although there is medical literature describing various techniques of Rapid Opioid Detoxification (ROD), further research into the physiology and consequences of ROD should be supported so that patients may be directed to the most effective treatment methods and practices." This policy statement was last reviewed in 2005 and is titled Rapid and Ultra Rapid Opioid Detoxification.

Use Outside of the US
The National Institute for Clinical Excellence (NICE) (United Kingdom) clinical guideline on drug misuse: opioid detoxification recommends that "Ultra-rapid detoxification under general anesthesia or heavy sedation (where the airway needs to be supported) must not be offered. This is because of the risk of serious adverse events, including death" (NICE, 2007).

Summary
The data supporting the safety and effectiveness of ultra-rapid detoxification under anesthesia are limited. Adequate safety has not been established. The heterogeneity of the patient populations in the studies makes it difficult to draw general conclusions. Comparisons to established approaches to detoxification are lacking. Further studies are needed that compare the duration and severity of symptoms associated with ultra-rapid detoxification under anesthesia and other detoxification methods. Additional research is needed to address the short- and long-term post-procedure abstinence rates. Response to ultra-rapid detoxification under anesthesia may vary according to the duration of dependence or prior attempts at traditional detoxification.

In view of the lack of evidence from well-designed, randomized controlled clinical trials to evaluate the safety and efficacy of this treatment compared with other established methods of detoxification, the role of ultra-rapid detoxification under anesthesia as a method for opioid detoxification has not been established.

Coding/Billing Information

Note: 1) This list of codes may not be all-inclusive.
2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.
3) ICD-10-CM Procedure Codes are for informational purposes only and are not effective until 10/01/2015.

Experimental/Investigational/Unproven/Not Covered when used to report Ultra-Rapid Detoxification:

CPT* Codes	Description

90899	Unlisted psychiatric service or procedure

HCPCS Codes	Description
H0008	Alcohol and/or drug services; sub-acute detoxification (hospital inpatient)
H0009	Alcohol and/or drug services; acute detoxification (hospital inpatient)
H0010	Alcohol and/or drug services; sub-acute detoxification (residential addiction program inpatient)
H0011	Alcohol and/or drug services; acute detoxification (residential addiction program inpatient)
H0047	Alcohol and/or other drug abuse services, not otherwise specified

Revenue Codes†	Description
116	Private room and board for detoxification
136	Semi-private room and board for detoxification
146	Private deluxe room and board for detoxification
156	Detoxification ward
204	Psychiatric intensive care unit
209	Other intensive care unit
944	Drug Rehabilitation

ICD-9-CM Procedure Codes	Description
94.65	Drug detoxification
94.66	Drug rehabilitation and detoxification
94.68	Combined alcohol and drug detoxification
94.69	Combined alcohol and drug rehabilitation and detoxification

ICD-10-CM Procedure Codes	Description
HZ2ZZZZ	Detoxification Services for Substance Abuse Treatment

References

1. Albanese AP, Gevirtz C, Oppenheim B, Field JM, Abels I, Eustace J. Outcome and six month follow up of patients after ultra rapid opiate detoxification (UROD). J Addict Dis. 2000;19(2):11-28.

2. American Society of Addiction Medicine. Public policy statement on opioid antagonist agent detoxification under sedation or anesthesia (OADUSA). J Addictive Dis. 2000;19:109-12.

3. American Society of Addiction Medicine (ASAM). Public Policy Statement on Rapid and Ultra Rapid Opioid Detoxification. April 2000. Rev 2005. Accessed June 3, 2014. Available at URL address: http://www.asam.org/advocacy/find-a-policy-statement/view-policy-statement/public-policy-statements/2011/12/15/rapid-and-ultra-rapid-opioid-detoxification

4. Collins ED, Kleber HD, Whittington RA, Heitler NE. Anesthesia-assisted vs buprenorphine- or clonidine-assisted heroin detoxification and naltrexone induction: a randomized trial. JAMA. 2005 Aug 24;294(8):903-13.

5. Cucchia AT, Monnat M, Spagnoli J, Ferrero F, Bertschy G. Ultra-rapid opiate detoxification using deep sedation with oral midazolam: short and long-term results. Drug and Alcohol Depend. 1998 Nov 1;52(3):243-50.

6. DeJong CA, Laheij RJ, Krabbe PF. General anaesthesia does not improve outcome in opioid antagonist detoxification treatment: a randomized controlled trial. Addiction. 2005 Feb;100(2):206-15.

7. Eisendrath SJ, Lichtmacher JE. Other drugs and substance dependencies. Opioids. Tierney LM, McPhee SJ, Papadakis MA, editors. In: Current Medical Diagnosis & Treatment (Tierney). McGraw-Hill Companies, Inc.; 2005. p.1056-7.

8. Favrat B, Zimmermann G, Zullino D, Krenz S, Dorogy F, Muller J, et al. Opioid antagonist detoxification under anaesthesia versus traditional clonidine detoxification combined with an additional week of psychosocial support: a randomised clinical trial. Drug Alcohol Depend. 2006 Feb 1;81(2):109-16.

9. Gold CG, Cullen DJ, Gonzales S, Houtmeyers D, Dwyer MJ. Rapid opioid detoxification during general anesthesia: a review of 20 patients. Anesthesiology. 1999 Dec;91(6):1639-47.

10. Gowing L, Ali R, White JM. Opioid antagonists under heavy sedation or anaesthesia for opioid withdrawal. Cochrane Database Syst Rev. 2010 Jan 20;(1):CD002022. Review.

11. Gowing L, Ali R, White J. Opioid antagonists with minimal sedation for opioid withdrawal. Cochrane Database Syst Rev. 2009 Oct 7;(4):CD002021.

12. Hensel M, Kox WJ. Safety, efficacy, and long-term results of a modified version of rapid opiate detoxification under general anaesthesia: a prospective study in methadone, heroin, codeine and morphine addicts. Acta Anaesthesiol Scand. 2000;44:326-33.

13. Kosten TR, O'Connor PG. Management of drug and alcohol withdrawal. N Engl J Med. 2003 May;348(18):1786-95.

14. Krabbe PF, Koning JP, Heinen N, Laheji RJ, VanCauter VM, DeJong CA. Rapid detoxification from opioid dependence under general anesthesia versus standard methadone tapering: abstinence rates and withdrawl distress experiences. Addict Biol. 2003 Sept:8:351-8.

15. Maani CV, DeSocio PA, Jansen RK, Merrell JD, McGhee LL, Young A, et al. Use of ultra rapid opioid detoxification in the treatment of US military burn casualties. J Trauma. 2011 Jul;71(1 Suppl):S114-9.

16. McGregor C, Ali R, White JM, Thomas P, Gowing L. A comparison of antagonist-precipitated withdrawal under anesthesia to standard inpatient withdrawal as a precursor to maintenance naltrexone treatment in heroin users: outcomes at 6 and 12 months. Drug Alcohol Depend. 2002 Sep 1;68(1):5-14.

17. Moore DP, Jefferson JW. Opioid related disorders. In: Moore DP, Jefferson JW, editors. Handbook of Medical Psychiatry. 2nd ed. St. Louis, MO: Mosby, Inc.; 2004. Ch 43.

18. National Institute for Health and Clinical Excellence (NICE). Drug Misuse: Opioid Detoxification. National Clinical Practice Guideline Number 52. July 2007. Accessed June 4, 2014. Available at URL address: http://www.nice.org.uk/

19. New South Wales (NSW) Health. Rapid opiod detoxification guidelines. Document Number GL2011_009. July 21, 2011. Accessed June 3, 2014. Available at URL address: http://www.health.nsw.gov.au/aboutus/

20. O'Connor PG, Kosten TR. Rapid and ultra rapid opioid detoxification techniques. JAMA. 1998 Jan;279(3):229-34.

21. Physical detoxification services for withdrawal from specific substances. In: Center for Substance Abuse Treatment (CSAT). Detoxification and substance abuse treatment. Rockville (MD; 2006 Jan 18. p. 41-111. (Treatment improvement protocol (TIP); no. 45). Accessed June 3, 2014. Available at URL address: http://www.ncbi.nlm.nih.gov/books/NBK64115/

22. Renner JA, Ward EN. Drug addictions. In: Stern TA, Rosenbaum JF, Fava M, Biederman J, Rauch SL, editors. Massachusetts General Hospital Comprehensive Clinical Psychiatry. 1st ed.: Philadelphia, PA: Mosby-Elsevier; 2008. Ch 27.

23. Singh J, Basu D. Ultra-rapid opioid detoxification: current status and controversies. J Postgrad Med. 2004 Jul-Sep;50(3):227-32.

24. Strain EC, Lofwall MR, Jaffe JH. Opioid-related disorders. In: Sadock BJ, Sadock VA, editors. Kaplan & Sadock's comprehensive textbook of psychiatry. 9th ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2009. Ch 11.10.

25. Washington State Department of Labor and Industries. Guideline for Prescribing Opioids to Treat Pain in Injured Workers. Effective July 1, 2013. Accessed June 3, 2014. Available at URL address: http://www.lni.wa.gov/claimsins/Files/OMD/MedTreat/FINALOpioidGuideline010713.pdf

26. Wax PM, Ruha AM. Withdrawal Syndromes. Opioid Withdrawal. In: Irwin RS, Rippe JM, editors. Irwin & Rippe's Intensive Care Medicine. 7th ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2011. Ch 145.