
▶ An introduction to extended-release injectable naltrexone for the treatment of people with opioid dependence.

Substance Abuse and Mental Health Services Administration.

[US] Substance Abuse and Mental Health Services Administration, 2012.

Few treatments arouse as much controversy as long-acting naltrexone implants or injections which promise to block the effects of heroin for up to several months. But in the USA the injected form has been licensed for treating opioid dependence. This document offers official US clinical guidance to doctors undertaking the treatment.

Summary Naltrexone is an opiate antagonist which has no psychoactive effects but commandeers the neural receptors targeted by opiate-type ('opioid') drugs. Normally taken daily by mouth, the extended-release implant form inserted under the skin delivers blocking levels of the drug for up to six months. An alternative long-acting formulation approved for medical use in the USA and Russia instead takes the form of an intramuscular depot injection which lasts about a month. Both avoid the need to take medication daily, in theory overcoming the main shortcoming of oral naltrexone – that patients usually stop taking the tablets and resume use of heroin or other opioids. The featured document offers US physicians succinct introductory clinical guidance on using the intramuscular depot injection, marketed in the USA as Vivitrol.

Unlike the agonist medications methadone and buprenorphine, in the USA naltrexone can be prescribed by any healthcare provider licensed to prescribe medications; special training is not required. Practitioners in community health centres or private office settings can also prescribe it for purchase at a pharmacy. These factors may improve access to treatment for opioid dependence.

However, naltrexone requires patients to have been abstinent from opioids for a period prior to induction. Such abstinence can be difficult to achieve.

Risks

No comprehensive mortality data are yet available, but cases of fatal opioid overdose have been reported in patients who used opioids at or near the end of the one-month dosing interval or after missing a dose, or who tried to overcome the opioid blockade. If patients treated with extended-release injectable naltrexone relapse after a period of abstinence, it is possible that the dose of opioid they previously used may have life-threatening consequences. Physicians should warn patient of these risks and develop a relapse prevention plan that includes strategies to decrease the risks if relapse occurs. If patients continue to use opioids during treatment, transition to agonist medications may be considered to reduce the risk of death.

Because naltrexone displaces heroin or prescribed opioids from neural receptors, it can precipitate withdrawal symptoms. To avoid this risk, complete detoxification from opioids before initiating or resuming extended-release injectable naltrexone is necessary. At least 7–10 days without opioid use is recommended.

Injection site reactions – including pain, hardness, swelling, blisters, redness, bruising, abscesses, and tissue death – have been reported. Some are serious enough for surgery. The featured document gives advice on how to reduce these risks.

Use of the medication is contraindicated in patients with acute hepatitis or liver failure, and it should be discontinued if signs or symptoms of hepatitis develop.

Who benefits most?

Extended-release injectable naltrexone benefits opioid dependent patients at risk of resuming opioid use immediately after detoxification. People facing periods of greatly increased stress or other relapse risks may benefit from the reassurance of the blockade provided by the medication. Those with a short or less severe history of dependence may also want to consider it. Still others may opt for the extended-release formulation in order to help to demonstrate to professional boards, supervisors, drug court judges, or other authorities that they are at low risk of using non-prescribed opioids.

In particular, the following categories of people may be good candidates for the treatment:
- those who have not had treatment success with methadone or buprenorphine;
- those highly motivated for abstinence;
- these successful on agonists who wish to change their medication;
- patients not interested in agonist therapy to treat their opioid dependence;
- opioid dependent adolescents or young adults.

Other considerations

The efficacy of extended-release naltrexone has been established when given in conjunction with psychosocial therapies; it has not been studied as a sole component of treatment.

As with other medication-based therapies for opioid dependence, pain management can be challenging. People with opioid dependence who require opioids for chronic pain should be managed by pain management specialists. In light of its antagonist properties, extended-release injectable naltrexone may not be appropriate for these patients.

In emergencies it is possible for healthcare providers to reverse extended-release injectable naltrexone's opioid receptor blockade. However, higher than usual dosages of a rapidly acting opioid medication may be needed to achieve pain relief if a patient is still tolerant to opioids. These higher doses increase the risk of respiratory depression. Patients administered such high doses should be closely monitored by professionals trained in the use of anaesthetic drugs, management of respiratory depression, and the performance of cardiopulmonary resuscitation. Patients who are treated with extended-release injectable naltrexone should be encouraged to wear medical alert jewellery or carry a disclosure card to help emergency personnel provide pain management safely when these patients are unconscious or cannot otherwise communicate.

FINDINGS In the UK, neither implants nor depot injections of naltrexone have been licensed for medical use; they can still be (and have been; 1 2 3 4) used, but patient and doctor have to accept the added responsibility of a product which has not yet been shown to meet the safety and efficacy requirements involved in licensing. Official UK clinical guidance, which predates the US decision to licence injectable long-acting naltrexone for opioid dependence, merely comments that the medication has yet to be "licensed for drug treatment and safety information is missing". Later UK guidance saw long-acting naltrexone worthy of further attention for preventing relapse to illicit drug use following a course of treatment.

For more on this type of treatment see this Findings hot topic which also offers a one-click search for related studies. The hot topic entry points out that if opiate-type drugs are crutches relied on by deeply damaged individuals, naltrexone implants and injections instantly remove this support and can make it virtually impossible or very difficult to resurrect it. Some patients can find the supports they need in their lives, others will flounder and fall. Implants and injections are not insert-and-go solutions; patients should be regularly monitored and actively supported to make the life changes made more possible by a space free of domination by obtaining opiates and experiencing their effects. Many others will create this space by instead taking prescribed opiate-type drugs rather than blocking drugs like naltrexone. Given these understandings, for suitable and willing patients, long-acting naltrexone has a potentially valuable place alongside substitute prescribing among the techniques available for treating opiate addiction.

Last revised 29 June 2013. First uploaded 29 June 2013

Top 10 most closely related documents on this site. For more try a subject or free text search

Injectable extended-release naltrexone for opioid dependence: a double-blind, placebo-controlled, multicentre randomised trial STUDY 2011
Pharmacotherapies for the treatment of opioid dependence: efficacy, cost-effectiveness and implementation guidelines REVIEW 2009
Favorable mortality profile of naltrexone implants for opiate addiction STUDY 2010
Naltrexone implants compared to methadone: outcomes six months after prison release STUDY 2010
Challenges to antagonist blockade during sustained-release naltrexone treatment STUDY 2010
Improving clinical outcomes in treating heroin dependence: randomized, controlled trial of oral or implant naltrexone STUDY 2009
Drug policy and the public good: evidence for effective interventions REVIEW 2012
Oral naltrexone maintenance treatment for opioid dependence REVIEW 2011
Advancing recovery: implementing evidence-based treatment for substance use disorders at the systems level STUDY 2012
Naltrexone implants prevent opiate overdose STUDY 2006