Opioid Abuse and Dependence

Opioids are either derived from naturally occurring opium (e.g., heroin) or are made synthetically (e.g., methadone, buprenorphine). If used continuously, they have the potential for causing both physical and psychological dependence within 2-10 days.

Opioids have two main effects: an analgesic effect and a euphoric effect. Their euphoric effect is the reason why they can be abused. They can be used intravenously (IV), subcutaneously and intranasally or smoked. Remember that if someone reports opioid abuse, they may also be abusing other drugs.

What is opioid dependence?

Characteristic features include drug craving and maladaptive behaviour focused on obtaining opioids at any cost. Opioid misuse can be defined as a continuous compulsion to use opioids despite physical, psychological or social harm to the user.

The Tenth Revision of the International Classification of Diseases and Health Problems (ICD-10) suggests that the following are required for the diagnosis of opioid dependence:

- A strong desire or sense of compulsion to take the substance.
- Difficulty in controlling use.
- A physiological withdrawal state.
- Tolerance.
- Neglect of alternative pleasures and interests.
- Persistence of use despite harm to oneself and others.

Epidemiology

- In England, there were 295,224 adults using Drug and Alcohol treatment services in 2014 to 2015. Opiates (such as heroin) were the most common substance (152,964 adults).
- Men make up the majority of people presenting for treatment for opioid dependence.
- The age profile of the group accessing treatment services is rising, suggesting that older people with long-term dependence on opiates (mainly heroin) account principally for those people requiring such services. The substances for which young people most likely seek help are alcohol and cannabis.
- In 2014, there were a total of 3,346 deaths in England and Wales related to drug poisoning, the highest since comparable records began in 1993. 2,248 (67%) related to illegal drug use. Heroin and/or morphine were mentioned on the death certificate in 952 deaths and cocaine was mentioned in 247 deaths.
- There was a sharp rise in drug deaths in England, thought to be due to the global availability of increasingly pure heroin. In contrast, the corresponding death rate in Wales fell.

Acute opioid withdrawal symptoms

These include:

- Sweating.
- Watering eyes.
- Rhinorrhoea.
- Yawning.
- Feeling hot and cold.
- Anorexia and abdominal cramps.
- Nausea, vomiting and diarrhoea.
- Tremor.
Insomnia, restlessness, anxiety and irritability.
Generalised aches and pains.
Tachycardia, hypertension.
Goose flesh (goosebumps).
Dilated pupils.
Increased bowel sounds.
Coughing.

Fatigue and insomnia tend to follow these acute symptoms. Cravings can last for up to six months. Acute heroin withdrawal symptoms tend to ease after five days. Methadone withdrawal symptoms can take 10-12 days to subside.

Complications due to opioid dependence[1, 8]

Health problems
- Death (which may be due to overdose, suicide, accidents or health-related complications).
- Skin infection at injection sites (can be severe; necrotising fasciitis can occur).
- Sepsis.
- Infective endocarditis.
- HIV infection.
- Hepatitis A, B and C infection.
- Tuberculosis infection.
- Venous and arterial thrombosis (due to poor injecting techniques).
- Poor nutrition and dental disease.

Social problems
- Crime.
- Relationship problems.
- Child protection issues.
- Homelessness and deprivation.
- Working in the sex industry.

Psychological problems
- Craving.
- Guilt.
- Anxiety.
- Loss of cognitive skills and memory.

Presentation in primary care[1]

Someone who is opioid-dependent may present to primary care in a number of different ways, including:

- With a direct request for help for their dependence.
- With a medical complication due to their dependence.
- With clinical signs of opioid intoxication or withdrawal.
- With social problems including evidence of a forensic history.
- By disclosing their opioid abuse whilst presenting for another problem.

Provision of care for opioid misusers[9]

- All GPs have a duty to provide basic medical services to people who are dependent on opioids and they should screen patients for drug misuse.
- If detoxification and/or substitute prescribing are requested, after an initial assessment, GPs can refer to local specialist community drug services and there are usually locally agreed shared care guidelines. A care plan between the drug misuser and the service provider can then be drawn up.
- A GP may have a special clinical interest in the management of substance misuse in primary care and may be able to take more responsibility in the treatment of patients, particularly in complex cases.
- A multidisciplinary approach to care is needed.
Strict practice policies surrounding the care of drug misusers are advised. There are UK guidelines for drug misuse and dependence, produced by the Department of Health (England), the Scottish Government, the Welsh Assembly Government and the Northern Ireland Executive. Further information can be found in the separate Drug Misuse and Dependence UK guidelines article.

Assessment of someone presenting with opioid abuse or dependence

- The assessment of someone with drug dependence is discussed in detail in the separate Assessment of Drug Dependence article.
- Details about the nature of drug and alcohol abuse should be determined.
- Appropriate history and examination should be carried out, including a mental state examination.
- Drug testing should be performed to confirm opioid abuse.
- Assessment of risk and social functioning should be carried out.
- Screening, including for HIV and hepatitis B and C, should be offered.

Treatment of opioid intoxication

- If a patient has collapsed and is thought to be acutely intoxicated, call 999/112/911 and refer urgently to hospital.
- Naloxone (a pure opioid antagonist used for reversing opioid intoxication) has a rapid onset of action and can be given intramuscularly, IV or subcutaneously.
- Therapy is otherwise mostly supportive - eg, maintain airway, ventilation if necessary and IV fluids.

Treatment of opioid dependence

- A keyworker needs to work with the drug misuser to determine if they are suitable for substitute prescribing.
- The drug misuser also has to decide whether they would prefer opioid detoxification or induction and maintenance substitute prescribing.
- Detoxification from maintenance therapy at a later stage is an alternative.
- A relatively new approach - which commissioners of services for opioid-dependent patients are being encouraged to pursue - is that of recovery orientation. This attempts to improve on the previously somewhat defeatist attitude that few patients are curable and that the best that can be achieved is that challenging behaviour, criminality and risks to public safety are reduced. This may mean accepting that a large proportion of patients would remain on lifelong opiate substitution therapy. The goal of the recovery-orientation approach is that services should be reorganised with the aim of making it possible for patients to look beyond detoxification to a point where they will not only be able to stop substitution therapy but aim to become fully functioning members of society.
- See separate Opioid Detoxification article.
- See separate Substitute Prescribing for Opioid Dependence article.
- Psychosocial components of treatment are also important and are outlined in the separate Drug Misuse and Dependence UK guidelines article.

Prognosis

The National Drug Treatment Monitoring System reported that, for the year 2014-2015, 47% of patients attending UK drug treatment services achieved abstinence from illicit opiates when reviewed at six months.

Further reading & references


1. Opioid dependence; NICE CKS, April 2015 (UK access only)
2. Drug misuse: opioid detoxification; NICE Clinical Guideline (July 2007)
3. Naltrexone for the management of opioid dependence; NICE Technology Appraisal Guidance, January 2007
4. Dependence syndrome; World Health Organization, 2012
5. Adult heroin user recovery remains a challenge in England; Public Health England, 2015
7. Drug deaths in England and Wales reach record levels; BBC News, 2015
8. Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence; World Health Organization, 2009
10. Strang J; Medications in Recovery Re-orientating Drug Dependence Treatment, National Treatment Agency for Substance Abuse, 2012

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