

Opioid dependence: Detoxification

What is detoxification?

- A. Process of removal of toxins from the body?
- B. Admitting a drug dependent person in a hospital and giving him nutrition?
- C. Stopping drug use and providing treatment for withdrawal symptoms?
- D. Gradual reduction of drug use by the patient?

Introduction

- Detoxification: a process where a individual who is physically dependent on a drug is taken off the drug either abruptly or gradually.
- Purpose: minimize subjective and objective discomfort

Introduction

- Detoxification: Initial Phase of treatment of substance dependence.
- Includes-
 - treatment of withdrawal symptoms.
 - Assessment of health and psychosocial complications
 - Building therapeutic relationship.
- Pharmacotherapy has a primary role in this phase of treatment.

Methods

1. Gradual reduction of the substance in decreasing amounts
2. Abrupt cessation, **AND** :
 - a. Use of a drug pharmacologically similar to the substance on which the person is dependent, in particular one which produces cross tolerance.
 - b. Use of a drug which affects the mechanisms whereby withdrawal is experienced.
 - c. Symptomatic treatment to alleviate symptoms of withdrawal.

Abrupt total cessation of the primary drug and treatment of withdrawal is a widely accepted method.

What kind of medications are suitable for detoxification?

- Characteristics of a good agent for treatment of opioid withdrawals
 - Treat withdrawals
 - Longer acting
 - Safe
 - Cross tolerance
 - Less dependence potential
 - Easily available

Dose of medicines for detoxification

Depends upon

According to substance used.

- Potency, half life

Time elapsed since the last dose

Severity of dependence

- Duration of consumption, route of administration etc

Concomitant use of other drugs

Presence of general medical or psychiatric disorder.

Individual biological and psychological variables.

Dose of medicines for detoxification

Goal

Make the experience of withdrawal tolerable rather than suppress all symptoms.

Modify dosage according to assessment of withdrawal symptoms.

Least possible amount of medicine for the shortest period of time

Setting

- Indications for outpatient treatment.
 - Mild or moderate dependence
 - No previous treatment attempts
 - Good social support system
 - Absence of significant health damage
 - Geographical proximity

Setting

- Indications for inpatient treatment
 - Severe withdrawal states, multiple drug use
 - Medical complications/obvious psychopathology
 - Geographical distance
 - Failure of outpatient treatment
 - Parenteral drug use pattern/ intoxicated states
 - Crisis in social support system
 - Academic and research reasons
 - Multiple drug abuse.

Opiate Detoxification

○ Goals

- Ridding the body of acute physiological dependence.
- Diminishing pain and discomfort.
- Treating any medical problems discovered or making appropriate referrals.
- Beginning the process of educating the patient about issues related to health and relapse prevention
- Exploring issues such as family, vocational and legal problems that may need referral.

Factors Influencing Symptom severity

1. Specific Drug used.
2. Total Daily amount used.
3. Duration and regularity of use
4. Psychological factors

Signs and Symptoms of opiate withdrawal

- Aching of bones and muscles
- Anxiety, Dysphoria, Restlessness and broken sleep
- Craving
- Yawning, Lacrimation, Rhinorrhea, .
- Pupillary dilatation
- Nausea, vomiting, diarrhoea, abdominal cramps,
- Goose flesh

“Opening of all holes of the body”

Guidelines

1. Rely on objective signs and determine severity of withdrawal.
2. Identify drug of abuse, dose, duration, route of administration and last dose.
3. Monitor vital signs.
4. Maintain fluid and electrolyte intake
5. Reassure the patient.
6. Start appropriate drug treatment.
7. Screen urine for illicit drug use (if available)
8. Assess and treat associated medical problems.

Pharmacotherapy

- In clinical practice commonly used medications are:
 - Buprenorphine
 - Dextropropoxyphene
- Dose: titrated according to clinical symptoms.
 - Tab buprenorphine (S/I): 1.2 - 6mg in divided dose
 - Cap Propoxyphene 6-12caps, in 3 divided doses.
- Duration: 7-10 days and to be tapered between 11-15 days.
- Others: Hypnotics, Antidiarrhoeal, NSAIDs

Typical prescription

○ T. Buprenorphine (0.4 mg) 3 – 3 – 3

Or

○ Cap Proxyvon 3 – 3 – 3

○ T. Diazepam 5 mg 4 HS

○ T. Brufen 1 SOS

X 7 days

Other Approaches

- **Clonidine**, an α -2 adrenergic agonist
- Dose range: 0.2 mg/day.
- **NOT RECOMMENDED for OUTPATIENT BASIS:**
 - adverse side effects - Hypotension and sedation.
- Does not block all withdrawal symptoms:
 - Muscle aching and insomnia are not relieved.
- **Naltrexone in combination with clonidine:**
 - A more rapid method of detoxification: less than 72 hours
 - The former precipitating opioid withdrawal while the latter blocks at least some of the symptoms.

Other Approaches

- Auricular acupuncture: Electro-acupuncture involves small amount of electricity to needles inserted on points on external ear for opioid detoxification.

Other forms of detoxification

Ultra Rapid Opioid Detoxification

- Since 1970s: attempts to shorten the opiate withdrawal by clonidine and opiate antagonists
- Shorten the detoxification process to 6-8 hours by precipitating withdrawal by opioid antagonists under general anaesthesia / deep sedation

Other forms of detoxification

Ultra Rapid Opioid Detoxification

Advantages

- Rapidity

Disadvantages

- Morbidity / mortality
- Cost
- Ethical issues
- No evidence of greater long-term benefits

**Most Guidelines, do not recommend it /
recommend it for a selected patient sub-group**

Protracted withdrawal

- Management of protracted withdrawal takes longer duration
 - Weeks to months
 - Various non pharmacological methods like relaxation therapy, CBT may need to be used.

Conclusion

- Detoxification can take place either in the inpatient or outpatient settings depending on the patient's clinical needs and other psychosocial factors.
- An accurate and competent clinical assessment is essential when detoxification and subsequent treatment plans are formulated.

Conclusion

- Opiate withdrawal is not life threatening, but uncomfortable
- Achievement of a substance free state is preparatory for the more challenging but also more rewarding period of sustained abstinence.