

# Opioid Dependence

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## What is an opioid?

- drug
- similar effect to opium
- derivatives (opiates)
  - morphine
  - codeine
- synthetics (opioids)
  - oxycodone
  - dilaudid

## What is Opioid Dependence?

- chronic
- relapsing
- alterations brain chemistry
- alterations brain structure
- withdrawal symptoms
- disease

## Biological Basis of Opioid Dependence

- positively reinforces relapse
- tolerance develops over time requiring increased dosage to achieve desired effect
- withdrawals inhibit abstinence

## Cycle of Opioid Dependence

use → stimulation-reward

stimulation-reward → pleasure-euphoria

pleasure-euphoria → drug seeking

drug seeking → use

## Alteration of Brain Structure

- PET scan studies
- decreased D2 dopamine receptor availability in the addicted brain
- increased receptor occupancy?
- down-regulation of receptors?

## Genetics and Opioid Dependence

- nature vs. nurture
- both are important factors
- DNA and socialization both influence development and future behavior

## Risk Factors for Opioid Dependence

- family history
- repeated use with or without recurrent or chronic pain
- psychiatric disorders
  - depression
  - anxiety
- access - doctors, nurses, etc.
- history of recreational drug use

## Opioid Dependence Stigma

- social taboo
- lowers patient self-esteem
- others pass judgement

## Under-treatment of Opioid Dependence

- 75% do not get treatment in the United States
- patients fear the stigma and judgement of others
- doctors fear angering patients

## Opioid Dependence Behavioral Patterns

- often refill opioid Rx's early
- complain of lost prescriptions
- complain of stolen prescriptions
- doctor shopping
- constant anxiety / irritation

## Opioid Dependence Physical Signs

- pinpoint pupils
- constipation
- lower sexual function / desire
- track marks
- poor hygiene

## Opioid Dependence - Other Symptoms

- unexplained anger / irritation
- violence / abuse
- loss of friends / social interests
- missing work / school
- legal and financial problems

## Screening for Opioid Dependence

- C.A.G.E. test:
  - thought of **C**utting down?
  - others **A**nnoyed?
  - feeling of **G**uilt?
  - use morning **E**ye opener?
- D.A.S.T. test:
  - Drug Abuse Screening Test
  - 20 questions

## Opioid Dependence History Examination

- specific drugs
- duration
- frequency
- dosages
- periods of abstinence
- relapse triggers
- prior treatment
- individual withdrawal profile

## The Law and Treatment

- Prior to 2000 only methadone
- D.A.T.A. 2000
- Office Based Opioid Treatment
- Schedule 3, 4 and 5 drugs
- [www.DocOptIn.com](http://www.DocOptIn.com)

## Expanded Treatment Limits

- Initial certification = W30
  - waiver to treat up to 30 patients at a time in-office
- Second certification = W100
  - paper application after one year with W30 status
  - waiver to treat up to 100 patients at a time in-office

## Pharmacology - Buprenorphine

- poor pain relief & poor euphoria
- low risk respiratory depression  
- ceiling effect
- blocks craving and withdrawals
- 2 or 8 mg scored pill

## Pharmacology - Naloxone

- blocks euphoria / injection
- blocks euphoria / nasal use
- negligible absorption P.O. / S.L.
- 2 / 0.5 mg (buprenorphine/naloxone)
- 8 / 2 mg (buprenorphine/naloxone)

## Sublingual Dosing

- hold under tongue 5-10 minutes
- good buprenorphine absorption
- poor naloxone absorption
- swallow = 1<sup>st</sup> pass effect

## Buprenorphine-Naloxone Safety

- low respiratory depression risk
- limited injection abuse potential
- limited nasal abuse potential
- decreased cravings
- decreased withdrawals

## Buprenorphine-Naloxone Risks

- Combined with IV or intranasal benzodiazepines can produce fatal respiratory depression
- Screen all patients
  - IV CNS depressants
  - Intranasal CNS depressants

## Buprenorphine-Naloxone Side Effects

- Constipation #1
  - stimulatory laxative
  - senna
- Withdrawal symptoms:
  - mild flu-like
  - mild headache
  - mild G.I. upset
  - mild body aches

## Medication Contraindications

Similar to other opioids:

- hepatic / renal impairment
- pulmonary compromise
- thyroid / adrenal conditions
- CNS depression / coma
- acute G.I. or head injury
- biliary / urethral dysfunction
- pregnancy (cat. C) / nursing

## Precipitated Withdrawals

Buprenorphine withdrawal = mild flu

- behavioral modification
- significant trigger elimination
- slow wean

Precipitated Withdrawals = very severe

- occurs on induction
- occurs after relapse
- last opioid use too close to first dose of buprenorphine

## Avoiding Precipitated Withdrawals

- Clinical Opiate Withdrawal Scale (COW scale)
- Learn during certification
- The bible to avoiding precipitated withdrawals
- If the numbers don't add up  
**DON'T START**

## Transferring from Instant Release

- dilaudid
- hydrocodone
- morphine IR preps
- oxycodone IR preps

Stop all opioids **AT LEAST** 12 hours

COW scale prior to first dose

## Transferring from Extended Release

- morphine ER preps
- oxycodone ER preps

Stop all opioids **AT LEAST** 24 hours

COW scale prior to first dose

## Transferring from Methadone

≤ 30 mg/day methadone for 7 days

Stop all opioids **AT LEAST** 24 hours

COW scale prior to first dose

--- OR ---

Transfer to IR or ER opioid for 2-4 weeks before starting treatment

## Treatment Pathway

Day 1: induction (first dose in office)

Day 2: evaluation (phone or office)

Week 1: stabilization (variable dosing)

Maintenance: open ended / individual

Wean: self (patient) or medical (w/doctor)

## Dosing Guidelines

- Each patient individual
- Each treatment plan individual
- No one-size-fits-all
- Average dose: 8 - 16 mg/day
- Above average: 24 - 48 mg/day

## “Traffic Light” Dosing Guideline

|                                      | mg / day         |
|--------------------------------------|------------------|
| <b>GREEN</b><br>average use          | $\leq 16$        |
| <b>YELLOW</b><br>patient variability | $> 16 - \leq 24$ |
| <b>RED</b><br>full individual review | $> 24$           |

## Relapse

- Normal part of treatment
- Like learning to ride a bike
- The important thing is to get up
- Learn from mistakes
- Repeat COW scale

## Clinical Trial Data

- Medications alone seldom cure
- Best results achieved combining medication and counseling:
  - improved treatment retention
  - reduction in relapses

## Medication Benefits to Patients

- decreased cravings
- decreased withdrawals
- private treatment (office-based)
- reduced fear of stigmatization
- reduced potential for relapses
- no daily-dosing at a clinic
- increased treatment retention

## Treatment Triad

- #1 = motivated patient
- Buprenorphine / Naloxone
  - reduced cravings
  - reduced withdrawals
  - reduced relapses
- The cure is in the counseling
  - N.A. / A.A. (free)