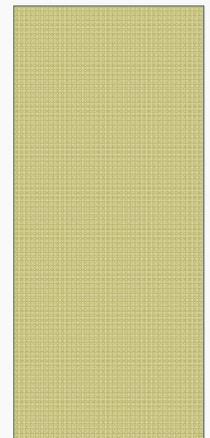


DRUGS USED IN THE TREATMENT OF ADDICTION

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MAJOR CATEGORIES OF TREATMENTS

- Detoxification and Post-Acute Withdrawal
- Maintenance
- Co-Occurring Disorders
- Pain Management in Addiction
- Anti-Craving Medications
- Antabuse

CO-OCCURRING DISORDERS

- This is a broad topic, but in practical terms, what I see most often in our practice are a few major categories:
 - MDD
 - Bipolar I and II
 - Personality Disorders
 - Generalized Anxiety Disorder
 - PTSD
 - ADHD

DETOXIFICATION AND PAWS

- Obviously, the detoxification process depends on the drug(s) being used prior to treatment.
- The problem, even with some rather sophisticated screening tests, it is not always obvious what drugs are being abused.
- Careful history is helpful, but not always fool-proof
- Confirmatory testing and careful observation of the patient may be all that one has to go on early in the process.

PHYSICAL SYMPTOMS

- Because of the mixtures of drugs currently being used, it can be tricky, even with a reasonable drug screen, to know what needs to be treated early on.
- Treat the patient and not the drug test.
- Opiate intoxication causes constricted pupils, Amphetamine intoxication causes dilated pupils, but withdrawal can mimic intoxication and vice-versa. Mental status changes can be variable.
- We use standard withdrawal scales (COWS and CIWA) and train nurses to score the patients with reasonable reproducibility.

WITHDRAWAL DANGERS

- Opiate overdose is obviously lethal, but opiate withdrawal, while having morbidity associated with it (chills, restlessness, back and muscle pain) is not considered life-threatening.
- Alcohol withdrawal, on the other hand, if left untreated, can lead to delirium tremens and carries a substantial mortality if seizures and consequences such as aspiration or intractable seizures are not prevented and/or treated.
- Benzodiazepine withdrawal is associated with significant seizure morbidity even with treatment.

ALCOHOL AND BENZO WITHDRAWAL

- At our institution, we use phenobarbital as our standard alcohol withdrawal medication. We do this because when we used benzodiazepines, we found that we were running into issues with overmedication, especially in older individuals. We still use short acting benzodiazepines such as Serax for individuals who have liver disease significant enough to be concerned about metabolism of sedative-hypnotic drugs. We use a CIWA scale for titration of the medications and taper over about 5 days for alcohol and 10 days for benzos.

OPIATE WITHDRAWAL TREATMENT

- When detoxing from opiates, the locus ceruleus of the brain puts out large amounts of norepinephrine which is responsible for a lot of the symptoms of opiate withdrawal associated with “going cold turkey” and “kicking the habit.”
- To counteract this, we use clonidine which is an epinephrine blocker. The only problem with clonidine is that it lowers blood pressure. Therefore, the BP must be monitored and the patient must be hydrated.

OPIATE WITHDRAWAL TREATMENT

- Other symptoms of opiate withdrawal include diarrhea, muscle aches and other “flu-like symptoms.”
- These symptoms can be counteracted with anti-diarrheal medications, muscle relaxers, NSAIDs, etc.
- Primary treatment, however, is the use of opiate agonists (methadone) or opiate agonist/antagonists (buprenorphine)
- I will discuss methadone and buprenorphine pros and cons...

COCAINE OR AMPHETAMINE

- No specific withdrawal syndrome.
- People are tired and depressed.
- Need rest and fluids.
- Topamax may decrease cravings

MAINTENANCE

- Opiate use disorder patients may be maintained on either buprenorphine, an opiate agonist/antagonist
- Methadone
- Advantages of buprenorphine – can be prescribed without as much regulatory restrictions.
- Is an agonist/antagonist which may decrease its abuse.
- Advantages of methadone – Long acting
- Disadvantages - Methadone must be dosed at methadone clinic until take home doses allowed.

CO-OCCURRING DISORDERS

- Depression
- Bipolar I and II
- Anxiety
- Other

FIRST OF ALL:

- Difficult to definitively diagnose a patient regarding co-occurring disorders without a few months of sobriety.
- Unfortunately, we are rarely afforded the luxury of being able to wait since there are dangers involved in not treating significant symptoms.
- History is often helpful in making treatment decisions in that there may have been evidence for a psychiatric diagnosis prior to substance use disorder.

DEPRESSION

- Very common symptom in addictive disorders but DSMV criteria for Major Depressive Disorder specifically states that the depression should not be caused by substances. Tough call in our business.
- Many of the criteria for depression are symptoms of withdrawal or SUD in the first place.

MEDICATIONS

- SSRIs
- SNRIs
- TCAs and tetracyclics
- Drugs used to augment antidepressants

BIPOLAR I AND II

- Bipolar I – recommended that mood stabilizer be used alone
- Bipolar II – Mood stabilizer plus anti-depressant
- For acute manic episode, an anti-psychotic medication is used to stabilize and then consider other drugs for maintenance.

PERSONALITY DISORDERS

- Not “medicatable” per se, but for some personality disordered individuals, sometimes a mood stabilizer or anti-depressant can be helpful to “take the edge off” so that the patient is stable enough to participate in DBT, ACT or 12-step program.

PTSD

- Exposure therapy and DBT are modalities of choice, but again, sometimes the trauma has been so severe that medications are needed to calm the patient down enough to participate in therapy.
- SSRIs still drug recommended by VA for first line therapy. We can discuss the various medications that can be used, but there is not a lot of data to convince me about the use of alpha and beta blockers, atypical antipsychotics etc. but as always, medications should be individualized.

ADHD

- Saved this for last because it is controversial.
- First of all, the diagnosis is not always accurate.
- Emory University Hospital did study showing a lot of ADHD individuals were more correctly diagnosed Bipolar I
- I don't like to use stimulants in addicted individuals.
- I try them first on Wellbutrin or Strattera and see.
- Occasionally, but rarely, I will break my own rule and put individuals on low dose amphetamines if they are non-functional of stimulants.

ANTI-CRAVING MEDICATIONS

- Campral (acamprosate)
- Unknown mechanism of action. Thought to somehow modulate the GABA system to reduce alcohol cravings.
- Campral is similar to GABA and the amino acid taurine. Works at NMDA receptor as an agonist.
- 2 (333) mg tablets tid
- Can cause some diarrhea. Otherwise safe. No hepatic toxicity to speak of.

NALTREXONE

- ReVia – oral form
- Vivitrol – injectable form
- Also available as implant

- Sits on opiate receptors. Blocks effect of opiates up to a point. Seems to benefit some people with alcohol use disorder.

ANTABUSE

- Interesting history. Scandinavian tire plant switched their manufacturing chemicals and the guys who worked at the plant started getting sick when they went out for drinks or a beer after work.
- Disulfiram was isolated and found to work by inactivating the enzyme alcohol dehydrogenase which causes a build-up of acetaldehyde in the blood after alcohol use which makes people violently nauseated and sick to the stomach.
- Works if you take it, but tough sell. Some people drink through it.

QUESTIONS?

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