Fact Sheet: Buprenorphine

Common Questions about Buprenorphine:

- **What is the typical dose of buprenorphine and how is it taken?**
- **How does someone know buprenorphine is working?**
- **How long does an individual take buprenorphine?**
- **Why is naloxone added to buprenorphine in the brand name Suboxone?**
- **What is precipitated withdrawal?**
- **What is a buprenorphine induction?**
- **Who can prescribe buprenorphine?**
- **Can someone overdose on buprenorphine?**

What is the typical dose of buprenorphine and how is it taken?

- Every person is different, and dosing should be individualized to each person based on their report of a reduction of withdrawal symptoms and cravings.
- Most people start buprenorphine at a dose of 2-4mg, and slowly increase until withdrawal symptoms stop.
- The recommended therapeutic (effective) dose of buprenorphine is between 16 mg and 24 mg.[1]
- A typical maximum dose is 24 mg/per day, though some patients may require more to manage their withdrawal symptoms.[1]
- Buprenorphine/naloxone (Suboxone) comes in two different forms:
  - Film (buccal): Placed in cheek to dissolve
  - Tablet (sublingual): Placed under tongue to dissolve
- Other forms of buprenorphine medication include:[1]
  - **Implant:** Brand name Probuphine. Probuphine includes 4 implants that are placed in the arm and provide a steady release of buprenorphine for up to 6 months.
  - **Injection:** Brand name Sublocade. Extended release injection that lasts one month. A person has to have had an effective dose of either the film or tablet for at least 7 days prior to getting an injection.

How does someone know buprenorphine is working?

- A person will stop feeling withdrawal symptoms.
- A person will also experience fewer cravings to use opioids. The intensity of cravings will go down, but they may not completely go away.[1]
  - Someone taking buprenorphine may still have cravings to use other substances such as cocaine, benzodiazepines, alcohol, etc.

The 3 Dimensions of Cravings:

Frequency

Number of separate times a person starts to experience a craving during the day.

Duration

Once a craving starts, it can range in how long it lasts at a high, distracting level. This could be minutes to hours.

Severity

Cravings range in intensity, such as how overwhelming, distracting, and painful they feel. Scale of 1-10; 1 = very low severity and 10 = high severity.

It is important to notice all characteristics of cravings to see how cravings change overtime.

How long does an individual take buprenorphine?

- The amount of time someone takes buprenorphine can range from person to person, but research has shown that individuals who stop buprenorphine have a higher risk for relapse, overdose, and death.[2-4]
- Buprenorphine should be continued for as long as the individual finds it helpful in meeting their substance use and life goals.
- Many people mistakenly think that they are only "truly better or in recovery" once they stop buprenorphine. This is inaccurate. Opioids can cause lasting changes in a person's brain. This means medication is often needed long-term, so a person can function and reach their goals, such as getting or keeping employment, going to school, gaining independent housing, and connecting with family and friends.
- Unfortunately, due to stigma and lack of knowledge, health care providers, addiction specialists, family members and friends, and individuals experiencing an opioid use disorder, may believe that a person "needs to lower their dose or work towards coming off medication" after a period of time. This recommendation is not backed up by current research. What the research shows is that the longer people continue buprenorphine treatment, the longer they have a lower risk for relapse and overdose compared to individuals who stop taking buprenorphine.[2-4]
- It is important to have ongoing conversations with a health care provider about buprenorphine treatment and evaluate the risks and benefits of changing or stopping this medication over time.

Why is naloxone added to buprenorphine in the brand name Suboxone?

- Naloxone is an opioid antagonist, which means it connects to opioid receptors in the brain and blocks opioids from having an effect. Naloxone is added in combination with buprenorphine and sold under the brand name of Suboxone. Suboxone prescriptions have two numbers "8mg/2mg" - the first is the amount of buprenorphine, followed by the amount of naloxone.

- Naloxone is added to buprenorphine with the primary purpose of discouraging individuals from misusing it.[1]
- When buprenorphine is taken as prescribed and at the correct dose, it does not typically produce euphoria or a high. If it is not taken as prescribed a person may experience a high/euphoric feeling.[1]
- Suboxone is taken by letting it dissolve under the tongue (tablet) or in the cheek (film). Naloxone is not absorbed into the bloodstream when the medication is dissolved in the mouth. The buprenorphine is active, but the naloxone is inactive. However, if a person doesn't dissolve the Suboxone in the mouth as prescribed and attempts to inject the Suboxone, the naloxone would activate and would travel to the brain faster than the buprenorphine. This means the naloxone would block the opioid receptors before the buprenorphine could produce a high/euphoric sensation.[1]

What is precipitated withdrawal?[1]

- Precipitated withdrawal happens when a person takes buprenorphine while having too many other opioids still in their body.
- The reason for this has to do with how strong buprenorphine is. Think about opioids as magnets that connect strongly to opioid receptors in the brain. Magnets have different strengths. For example, some magnets are so weak they barely hold a picture to the fridge.
- Buprenorphine is a stronger "magnet" than opioids like heroin or oxycodone. Buprenorphine has a stronger pull to the brain's opioid receptor. This means that when buprenorphine enters the brain it can "knock out" other opioids, such as heroin, that are sitting in the brain's opioid receptor.
- Normally, withdrawal comes on gradually as opioids slowly lose their effect. In precipitated withdrawal, withdrawal symptoms come on suddenly and intensely because all of the opioids get "knocked out" too quickly by the buprenorphine.

What is a buprenorphine induction?

- A buprenorphine induction involves slowly taking buprenorphine and monitoring the effects.
- A buprenorphine induction serves two primary purposes:
  - Prevent precipitated withdrawal
  - Know the correct dose of buprenorphine needed to stop a person's withdrawal symptoms and reduce cravings
- Depending on the provider and treatment setting, the buprenorphine induction can happen in an office setting or at a person's home.
- How long into withdrawal does a person wait before they can take buprenorphine and avoid precipitated withdrawal?
  - It depends on the types of opioids a person is using (short acting versus long acting), but generally it is typically a range of between 12-24 hours after last use.[1]
  - Providers use what is called the Clinical Opiate Withdrawal Scale (COWS) - once a person has a score of about 5 or 6 the first dose of buprenorphine is administered.
  - A provider will usually start a person at 2-4mg and increase the dose every hour until they notice that withdrawal symptoms have stopped.[1]

- Buprenorphine can also be started even if a person isn't in active withdrawal or hasn't had opioids in their system in a few days.

Click here to see what the Clinical Opiate Withdrawal Scale (COWS) rating system looks like from naabt.org: http://www.naabt.org/documents/COWS_Induction_flow_sheet.pdf

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Who can prescribe buprenorphine?

- Physicians of any specialty, nurse practitioners, and physician assistants can all prescribe buprenorphine, in both inpatient and outpatient settings.
- Providers have to complete 8-24 hours (depending on type of provider) of training and receive a waiver from the Drug Enforcement Agency (DEA) which gives them a license and allows them to prescribe buprenorphine.
- Many buprenorphine prescribers are primary care providers, who can integrate the treatment of opioid use disorder into the person's overall health in primary care. Buprenorphine is also prescribed in hospitals, emergency departments, specialty medicine clinics (i.e., OBGYN) and clinics that specialize in addiction treatment.

Can someone overdose on buprenorphine?

- Buprenorphine has a very low risk for overdose because of how it works in the brain.[1]
- To overdose on opioids, the opioid must activate the opioid receptor in the brain to a very high degree. Buprenorphine has what is called a "ceiling effect" which means it can only activate the opioid receptors in the brain to a certain degree, even if a person keeps taking more buprenorphine. Heroin does not have this ceiling effect, which means taking more of it will continue to activate the opioid receptors in the brain to the point where it can cause an overdose.[1]
- In rare cases, a person may have buprenorphine in their system when they have an overdose, however, this is typically because they combined the buprenorphine with large doses of other drugs that were not prescribed to them, such as benzodiazepines and alcohol.[1]

References:

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