Appendix 15

Fact Sheet: Buprenorphine-naloxone (Suboxone)

Indications:

Buprenorphine is a life-saving medicine. Strong evidence supports that it reduces death (overdose and all-cause mortality) by over two times.

Buprenorphine's effects include pain relief, decreased withdrawal symptoms, and decreased opioid cravings. It does not tend to produce a high, and it is much less likely than other opioids to produce respiratory depression.

At an effective dose, buprenorphine enables stabilization of neurobiologic brain processes and supports all the activities needed for recovery. When buprenorphine supports a person with an opioid use disorder to not use other opioids (except in specific cases of need with medical supervision), and go forward with recovery and responsible life activities, that person is in recovery, not active addiction.

Pharmacology:

Buprenorphine is a partial opioid agonist at the mu receptors. It is often combine with naloxone (buprenorphine-naloxone) to deter people from misusing it. The naloxone (aka narcan) is not active when given sublingually or swallowed. (It is added only to discourage people from crushing the drug and injecting. If injected, it would cause precipitated withdrawal.)

Avoiding Precipitated withdrawal when starting buprenorphine:

- Buprenorphine binds more tightly than other opioids at the mu opioid receptors. It will displace or block other opioids (such as heroin, oxycodone, morphine, hydromorphone, or methadone) at these receptors, but will exert only about 30%-40% of the mu-effect (pain relief or euphoria for example). It is, nevertheless, often remarkably effective for pain.
- Because of this ability to displace other opioids, it will precipitate withdrawal symptoms if given before "natural" withdrawal from other opioids occurs.

  This is why a patient starting buprenorphine must be in withdrawal already in order to get relief from symptoms of addiction, instead of temporarily making them feel worse. For this "natural' withdrawal to occur, patients will need to stop other opioids for around 6-24 hours before starting buprenorphine.

Assessing withdrawal before administering the first dose during induction:

- Clinical Opioid Withdrawal Scale (COWS), available in Epic under Document Flowsheet, is the measure of withdrawal level, and first dose buprenorphine is usually given when the score reaches 10 or 11. (If recent use of long-acting opioid such as methadone, higher COWS score may be needed to start, often minimum of 15)

- After the first dose, subsequent doses can be given at one-hour intervals for ongoing withdrawal symptoms or craving. The COWS score does not have to reach 10 after the first dose.

How to administer: Sublingual administration

- Buprenorphine must be given sublingually, and must fully dissolve into a slurry, to be effective. Instruct patient not to swallow the pill or the saliva under the tongue until the tab is dissolved. If the tab is swallowed it will not be absorbed adequately. The dose should be observed, and the patient should wait 15 minutes after it dissolves to eat or drink. (Dissolving SL tab may go better if patient is not asked to talk much while it is dissolving.)

Induction timeline:

- It may take several days for an effective dose to be achieved; while that happens, trust the patient's report of cravings, and give the medication up to the maximum ordered for that day.
- Suboxone is usually effective at somewhere between 8 and 24 mg per day (based on the buprenorphine dose). It does have a ceiling effect, and doses above 24 mg per day are rarely more effective, though occasionally a dose of up to 32 mg per day is helpful, especially in acutely painful conditions.
- Like other opioids, buprenorphine in combination with other CNS-depressants is much more risky than Buprenorphine alone. Patients should avoid alcohol and benzodiazepines while taking buprenorphine.

Managing buprenorphine in setting of acute pain/ surgery:

- It is no longer the usual practice at OHSU hospital to stop buprenorphine prior to surgical procedures, as was often done in the past. Buprenorphine itself has analgesic effects, and does not completely block the pain relieving effect of other opioids. Opioids such as hydromorphone, fentanyl, or even oxycodone will still give pain relief with a stable dose buprenorphine on board, but may need to be used in higher doses than in a patient who is not taking buprenorphine.

Reasons for NOT using Buprenorphine can include:

- Patient preference (such as preferring methadone, not wanting opioid medication for treatment, previous negative experience with some form of buprenorphine)
- Acute pain which makes stopping other opioids temporarily not an option
- In the community, providers must have a special DEA license (called an X waiver) to prescribe buprenorphine for addiction. Sometimes we do not start buprenorphine because we do not have any provider to continue it after discharge.

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