ENDING BUPRENORPHINE THERAPY
VARIOUS REASONS TO STOP BUPRENORPHINE

- pregnancy and lactation
- emergency surgery/elective surgery
- difficult to manage side effects of buprenorphine
- patients showing signs of continued addiction or substance abuse
- completion of rehabilitation program with no further cravings, stable emotional state, ability to deal with depression, stress and anxiety without craving drugs
- lifestyle and behavior changes that indicate ability to maintain long term recovery without buprenorphine
• **sudden buprenorphine cessation - stopping cold turkey**

  • buprenorphine withdrawal lasts for a month or longer compared to heroin with withdrawals lasting 7 days.

  • initial 72 hours physical symptoms predominate including nausea, vomiting, diarrhea, diaphoresis, irritability, anxiety.

  • after 1 week the physical symptoms improve and general aches and pains continue with insomnia and mood swings

  • after week 2 depression increases

  • after one month the psychological symptoms of depressions and cravings continue and relapse likelihood is highest
• Tapering off of buprenorphine is a lengthy endeavor. However, overcoming a far worse opioid addiction to get to this point, many patients have the resolve to take on such a challenge.
• SIGNS AND SYMPTOMS OF BUPRENORPHINE WITHDRAWAL:
  • hot and cold flashes
  • fatigue
  • myalgia
  • cravings, both physical and mental
  • diarrhea
  • diaphoresis
  • nausea and vomiting
  • anorexia
  • insomnia
  • irritability/moodiness/depression/anxiety/suicidality
EMERGENCY BUPRENORPHINE TAPER

- If a situation arises where buprenorphine (Suboxone) must be stopped suddenly, <1 mg doses may be used when withdrawal symptoms become intolerable allowing the withdrawal to proceed will more comfort but still relatively quickly.

- **Surgery considerations:** Same day surgery.

  - Recall it takes 2-3 days to clear buprenorphine

  - If significant surgery is anticipated with predicted need for more potent analgesia than buprenorphine would provide, recommendation is to use IV Fentanyl with cautions titration under intensive monitoring. Since buprenorphine has a greater affinity for the mu receptor than full agonist opioids, as the blood levels of buprenorphine fall, more mu receptors become available and the effect of the opioid agonist will be amplified with greater analgesia but greater respiratory depression. These patients should monitored in the hospital for 3 easy after discontinuing buprenorphine and lower the dose of the opioid as buprenorphine is cleared.
• If surgery is expected to cause mild to moderate acute pain, continue buprenorphine and add non-opioid pain modalities such as regional blocks, NSAIDS and acetaminophen.

• If moderate pain is predicted, use IV buprenorphine.

• If severe pain is anticipated, stop buprenorphine and carefully titrate short acting opioids until buprenorphine is cleared.

• If surgery is elective and scheduled, titrating down from buprenorphine 1-2 weeks prior to the planned surgery lessens the likelihood of problems with post op pain management.
• GENERAL RULE:

• Pace the taper with the body’s ability to adapt to each decrease.

• Dose decrease of 25% separated by at least 10 days is reported by many to be tolerable.
• To understand the tapering process, a few concepts should be understood

• Buprenorphine has a ceiling effect and at certain doses of buprenorphine nearly all opioid receptors are occupied. Each helps induce a small opioid effect. The cumulative effect created from all receptors the maximum or ceiling effect. Taking more than the ceiling dose involves so few additional opioid receptors that the patient is not able to discern any additional opioid effect.

• For this reason, tapering can be more aggressive at higher doses than at lower doses when more receptors are affected by dose decreases.

• 2mg daily is generally the midpoint of a taper and the pace of the taper slows.
• BUPRENORPHINE TAPERS MAY TAKE MANY FORMS.
• ONE EXAMPLE: Initial dose of 16 mg /day
  • day 1: immediate reduction of 25% to 12 mg/day
  • day 6: reduce dose from 12 mg/day to 8 mg/day
  • day 11: 4 mg/day
  • day 16: 2 mg/day
  • day 24: 1.50mg/day
  • day 31: 1mg/day
  • day 39: 0.75mg/day
  • day 45: 0.50mg/day
COPING WITH WITHDRAWAL SYMPTOMS:

- Dopamine endorphins, serotonin and GABA all drop significantly with buprenorphine withdrawal.

- Exercise, hot showers, healthy eating, hydration, and pleasant diversions increase these substances and lessen symptoms of withdrawal.

- NSAIDS, acetaminophen, pepto-bismol, ginger ale, tums, Imodium, vitamins, amino acids, Gingeng, Kava root, Lemon balm, Magnolia root, fish oil and krill oil
HELPFUL SUGGESTIONS:

- taking buprenorphine first thing in the morning is best so that blood levels are lowest at night during sleep.

- this avoids anticipating the dose.

- simply cut the strips and meter out portions for the taper.

- tapers may be paused when a level of dose decrease causes unacceptable levels of withdrawal discomfort and returning to a higher dose for a few a days may be done.

- mid-taper breaks may be allowed to increase the dose to a point where withdrawals are more tolerable and then return to taper promptly. These breaks should not occur more than once or twice during the taper.