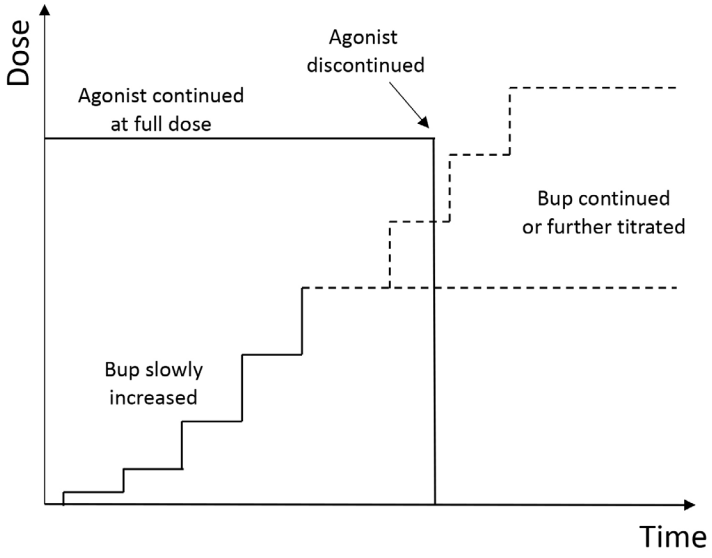
Buprenorphine Microinduction

Rationale for Microinduction

The standard method of starting a patient on buprenorphine (see "How to Discuss and Initiate Buprenorphine" fact sheet) involves having the patient stop all opioids hours to days before the induction. This period is needed because buprenorphine can trigger opioid withdrawal if given when the patient still has most of their opioid receptors occupied by agonists. The downside to this standard induction method is that patients don't like having to experience withdrawal, even if it only scores as "moderate" on our rating scales.

In order to get around this, a newer induction strategy is gaining popularity, called microinduction (or microdosing). This involves introducing small amounts of buprenorphine and slowly increasing the dose while the patient remains on an opioid agonist. Once the buprenorphine dose is high enough to prevent withdrawal, typically 8–12 mg, the agonist is stopped. The idea is that no single dose increase is enough to cause discomfort.

Since the patient must remain on a full agonist for the duration of the microinduction, this strategy works best for patients on prescription opioids. While some clinicians are using microinduction to transition patients off of street opioids, we don't recommend it as a standard practice because microinduction takes longer than standard induction, leaving the patient undertreated and exposed to street opioids for longer than necessary. Microinduction is particularly well suited for methadone, whose long half-life can make inductions tricky. It's also appropriate for those who have previously failed a typical dosing initiation or are resistant to undergoing a withdrawal period. Here's a schematic of what's going on:



How to Do Microinduction

There is no standard microinduction protocol, at least not yet. You can use either sublingual or transdermal formulations of buprenorphine. The challenge is that it can be hard to procure the very low doses required, since microinduction starts with 0.5 mg or 1 mg doses—a fraction of the 2–8 mg formulations usually available. Films are easier than tablets to divide into small doses since tablets tend to crumble if split into quarters or eighths. Here is a sample protocol, which you should adjust as needed depending on your patient's response:

Day	Buprenorphine Dosage	Opioid Agonist Dosage
1	0.5 mg once	Full dose
2	0.5 mg BID	Full dose
3	1 mg BID	Full dose
4	2 mg BID	Full dose
5	2 mg TID	Full dose
6	2 mg QID	Full dose
7	4 mg TID	Stop
8+	Titrate as usual	

1. Ensure that your patient is currently taking a consistent dose of their current opioid agonist, such as oxycodone, methadone, etc.
2. Start patient on very small doses of buprenorphine using the accompanying chart as a guide. Buprenorphine with naloxone is the standard choice if using sublingual formulations.
3. Have patient stop their current opioid—typically patients can tolerate abruptly stopping the full agonist once they are on 8–12 mg total daily dose of buprenorphine.