

Pre-operative medication instructions for patients having surgery at Providence Alaska Medical Center

Please follow these instructions to optimize patient safety and reduce the risk of delay or cancellation.

Please instruct your patient to:

1. Take all scheduled medications and inhalers on the day of surgery (DOS), including pain medications, unless otherwise indicated below.
2. Hold all ACEI (“-pril”) and ARB (“-sartan”) medications on the DOS (except ECT patients); take other blood pressure medications unless otherwise instructed by cardiologist/cardiac surgeon. **ECT patients are to take ALL blood pressure medications on the DOS.*
3. NPO guidelines (excludes sips of water with scheduled medications):
 - (a) Adults: NPO 8 hours prior to surgery for *solid food*, and 2 hours for *clear liquids* (< 8 oz.).
 - (b) Children (< 12 yrs old): No *solid or fatty food* 8 hours prior to surgery. May have *formula or non-human milk* 6 hours prior to surgery, *breast milk* 4 hours prior to surgery, and *clear liquids* up to 2 hours prior to surgery.
4. Take insulin or other diabetic medications per instructions in **Attachment A**.
5. Ideally, hold all herbal supplements 7 days prior to surgery, per **Attachment B**.
6. Hold any amphetamines 7 days prior to surgery if indication for use is weight loss (e.g., phentermine, amphetamine, dextroamphetamine, ephedrine/ephedra). For all other indications, instruct patients to take the medication up to and including the DOS and educate about increased risk of blood pressure issues--refer to anesthesia if needed. If amphetamines are not stopped 7 days prior to surgery, instruct patient to continue taking them up to and including the DOS.
7. Anticoagulants & Antiplatelet Agents: The continuation or discontinuation of these medications is to be determined by surgeon and prescribing physician (e.g., cardiologist, neurologist), based on risk/benefit assessment of patient and surgery/procedure.
8. Opioid agonist-antagonists. Plan for perioperative management of **buprenorphine** or **naltrexone** is to be established by discussion among the surgeon, patient, and chronic pain provider. See **Attachment C** for details on perioperative management of these agents.

Attachment A

Pre-operative instructions for insulin and diabetes medication

Drug Type	Examples	Day before surgery	Day of surgery
Insulin pump	n/a	No change	Use “sick day” or “sleep” basal rate if possible. Otherwise, no change.
Long-acting insulins	• Glargine (Lantus) • Detemir (Levemir)	No change (50% of evening dose <i>if</i> patient has history of nocturnal or morning hypoglycemia, <i>or</i> has a pre-operative bowel prep)	50% of morning dose
Intermediate-acting insulins	• NPH (Novolin N, Humulin N-NF) • Zinc insulin (Lente) • Extended zinc insulin (Ultralente)	No change in daytime dose; 50% of evening dose	50% of morning dose
Fixed combination insulins	• 70% NPH/30% Regular • 50% NPH/50% Regular	No change	50% of morning dose (check blood sugar before coming to hospital or if symptoms of hypoglycemia)
Short- and rapid-acting insulins	• Regular (Novolin R, Humulin R) • Lispro (Humalog) • Aspart (Novolog)	No change	Hold dose
Non-insulin injectables	• Exenatide (Byetta) • Pramlintide (Symlin) • Liraglutide (Victoza)	No change	Hold dose
Oral diabetes drugs	• Metformin (Glucophage) • Glipizide (Glucotrol) • Pioglitazone (Actos) • Sitagliptin (Januvia)	No change (<u>Exception</u> : In patients with chronic kidney disease <i>or</i> receiving IV contrast dye, <i>metformin</i> should be stopped 24 hours before surgery)	Hold dose

Attachment B

Herbal supplements: Stop taking 7 days prior to surgery.

Supplement	Potential problems during surgery
Garlic	Bleeding (inhibits platelet aggregation)
Ginger	Bleeding (inhibits platelet aggregation)
Ginkgo	Bleeding (inhibits platelet aggregation)
Ginseng	Bleeding (inhibits platelet aggregation)
St. John's Wort (hypericin)	Prolonged sedation Hemodynamic instability Serotonin syndrome
5-HTP	Serotonin syndrome
Kava*	Prolonged sedation <i>*Taper off in 7 days prior to surgery; abrupt discontinuation may cause withdrawal</i>
Valerian root*	Prolonged sedation <i>*Taper off in 7 days prior to surgery; abrupt discontinuation may cause withdrawal</i>
Echinacea	Immune system impairment Hepatic dysfunction
Ephedra** (Ma Huang)	Severe hemodynamic instability, heart attack, stroke, death <i>**If this cannot be stopped at least 5 days prior to surgery, it should be continued up to and including the day of surgery.</i>

The following supplements may also (to a lesser extent) lead to bleeding, and should be stopped 7 days prior to surgery:

Fish oil/Omega-3 fatty acids
Vitamin E
Glucosamine
Dong quai
Feverfew
Horse chestnut
Chamomile

Bilberry
Bromelain
Saw palmetto
Flax seed oil
Grape seed extract
Dandelion root
Goldenseal (may cause dehydration)

Attachment C

Perioperative Management of Buprenorphine & Naltrexone

Beware of the following drugs:

- Buprenorphine (Subutex, Suboxone, Bunavail, Zubsolv, Sublocade)
- Naltrexone (Revia, Contrave, Vivitrol)
- Any drug containing either of these two

Buprenorphine is an opioid-agonist with an extremely high affinity for the opioid receptor. It cannot readily be displaced by anything but more buprenorphine. For procedures with significant post-op pain that is likely to require opioids for management, *buprenorphine patients should transition to a different opioid at least 5 days pre-operatively*. However, surgeries that do not involve significant post-op pain can be done with buprenorphine on board, as long as patients understand that their post-op opioid options will be limited—if buprenorphine is on board, the only consistently effective opioid will be more buprenorphine (and there is generally a ceiling effect at 32 mg per day). In these cases, buprenorphine is to be continued with post-operative pain management centering on multimodal analgesia (and regional techniques, where applicable), as well as possibly PRN buprenorphine.

**If any patient is still taking buprenorphine within 3 days of surgery, the patient is to continue this medication through the DOS.*

Naltrexone is an opioid-antagonist that completely blocks the opioid receptor. If patient is taking the oral form (Revia, Contrave), this medication is to be stopped *48 hours prior to the surgery*, if possible. If patient is taking the monthly injection form (Vivitrol), surgery should be scheduled *30 days after the last injection*. If surgery is not likely to require post-operative opioids for pain management, naltrexone may be continued through the DOS.

**Any formulation of naltrexone that is in a patient's system perioperatively will negate the effects of any intra-operative or post-operative opioids. No naltrexone patient should go into surgery without being informed of this.*