# 3 Myths About Anesthesia

Estimated reading time: 6min

#### Introduction

Over the years, I've come across some wild myths about anesthesia. They're part of a collective (mis)understanding of what anesthesiologists actually do—especially when it comes to how those mysterious drugs work. Well, buckle up because we're about to bust three big anesthesia myths!

#### 1. General anesthesia is just like sleeping.

Not exactly. While there are some similarities, the science tells us they're different [1]. Here's why:

#### Physiological vs. Induced State

Sleep is a physiological process your body needs to function. On the other hand, general anesthesia is an induced state created by medications. Once the drugs are in your system, their effects can't be reversed until they wear off naturally.

Fun fact: Some patients tell me they'll "fight" the anesthetic to see what happens. Spoiler alert—it doesn't work. Your willpower has no influence over anesthetics.

#### Arousal

When you're asleep, noises, touch, or pain can wake you up. Under general anesthesia? Nope. You're out cold, and no external stimuli can bring you to consciousness until the anesthetic loses its effect.

#### **Passing of Time**

After waking from sleep, you know time has passed—even if your estimate is not accurate. But when you wake up from general anesthesia, it's like time just...vanished. It's like a hiatus in time. Most patients ask, "Wait, has the surgery even started?"

So, what's happening in your brain during general anesthesia? These drugs essentially "shut down" the neural connections that help different parts of your brain "talk" to each other. As a result, you lose consciousness, awareness, and memory [1]. (Another fun fact: this is not how ketamine works. Curious? Drop a comment below, and I'll explain its unique effects!)

### 2. The anesthetist gives one dose, and the job's done.

If only it were that simple! Anesthesia is so much more than giving a shot and calling it a day.

Here's what really happens in a general anesthesia:

#### Step 1: Monitoring Your Vital Signs and Induction

Preparing all the medications and devices is the first phase. Then follows monitoring your vital signs, including heart rate, blood pressure, oxygen levels, temperature, and

more. After ensuring you're stable, the anesthesiologist and a specialized nurse will start inducing a general anesthesia, with 3 types of drugs: an inductor, a painkiller and a muscle relaxant.

## **Step 2: Securing the airway**

After you're under, the anesthesia team secures your airway to ensure you can breathe safely. For general anesthesia, this often means intubation (placing a tube through your mouth and into your windpipe).

## Step 3: Maintenance

An anesthesiologist—or sometimes an anesthesia nurse—<u>stays by your side</u> for the entire procedure, adjusting your medication, monitoring your vital signs and addressing potential complications [2].

Oh, and the idea that a single dose lasts the entire surgery? That's a myth too! Anesthesia machines deliver precise amounts of medication to keep you comfortably under. Once the surgery is done, we stop the medication, and you gradually wake up.

## 3. I shouldn't take my pills before surgery because I'll break the fasting rule.

Not true! Pills don't interfere with fasting, and they don't increase the risk of complications like food does.

Why do you need to fast? To reduce the risk of stomach contents entering your airway and lungs during intubation and surgery. But water and most medications don't stick around in your stomach long enough to cause issues [3,4].

If your doctor or nurse told you to take certain meds on surgery day, follow their advice. You can even drink water up to two hours before your procedure—it's safe and clears your stomach quickly [3,4].

Some medications shouldn't or can't be taken in the days before or on surgery day. Talk to your doctors if you have doubts.

P.S.: <u>New fasting guidelines</u> from the European Society of Anaesthesiology and Intensive Care are expected soon, but, for now, those are the recommendations we have.

## Conclusion

Anesthesia myths create confusion and unrealistic expectations, but here's the truth:

- 1. General anesthesia isn't sleep—it's a controlled shutdown of brain activity.
- 2. The anesthesia team doesn't leave your side for a second during surgery.
- 3. Taking your pills doesn't interfere with fasting.

Let's clear up these misconceptions together. Share this post with friends and family, and you're welcome to comment with your thoughts or questions. Let's talk about health!

# References

[1] Moody OA, Zhang ER, Vincent KF, et al. The neural circuits underlying general anesthesia and sleep. Anesthesia & Analgesia. 2021;132(5):1254-1264. doi:10.1213/ane.00000000005361

[2] Standards for basic anesthetic monitoring. Published 2020. Accessed January 8, 2025. https://www.asahq.org/standards-and-practice-parameters/standards-for-basic-anesthetic-monitoring

[3] Practice guidelines for preoperative fasting and the use of pharmacologic agents to reduce the risk of pulmonary aspiration: Application to healthy patients undergoing elective procedures. Anesthesiology. 2016;126(3):376-393. doi:10.1097/aln.00000000001452

[4] Rüggeberg A, Meybohm P, Nickel EA. Preoperative fasting and the risk of pulmonary aspiration—a narrative review of historical concepts, physiological effects, and new perspectives. BJA Open. 2024;10:100282. doi:10.1016/j.bjao.2024.100282