Obstructive Sleep Apnea and Surgery

What you should know

This handout explains what obstructive sleep apnea is and how it relates to your surgery.

What is obstructive sleep apnea?

Obstructive sleep apnea (OSA) is a chronic (long-term) disorder that affects your breathing while you are asleep. If you have sleep apnea, you may stop breathing or have shallow breathing while you are sleeping. You may start breathing again with a loud snort or choking sound.

OSA that is not diagnosed and treated may lead to other health problems. OSA also increases your risk of problems during and after surgery. This is why it is very important for your surgical team to know if you have sleep apnea.

What causes OSA?

While you are awake, the muscles of your throat keep your airway open. These muscles relax when you sleep. If you have OSA, your throat may close when these muscles relax and this blocks off the flow of air. Less air makes the oxygen levels in your blood drop. Your brain senses the lack of oxygen and causes you to wake up.

These periods of waking are very short. Most people with OSA do not remember them. But, every time your body goes through one of these cycles, your blood pressure goes up and your heart works harder.

How does OSA affect my health?

Over time, OSA causes high blood pressure and increases your risk of stroke, heart attack, heartbeat changes, heart failure, diabetes, and, sometimes, death.

And, because you do not get good sleep when you have sleep apnea, OSA may cause other symptoms that affect your daily life. These include feeling sleepy and being more likely to cause accidents while driving. OSA also makes conditions like depression or chronic pain harder to control.
The National Institute of Health reports that about 12 million Americans have OSA. It affects people of all ages, but is most common in:

- People who are middle-age and older
- People who are obese
- Men
- Women after menopause
- People who have family members with OSA
- People who have metabolic syndrome (a group of risk factors that increase the risk for heart disease, stroke, and type 2 diabetes)

**How do I know if I have OSA?**

Most people who have sleep apnea do not know they have it because it only happens while they are asleep. Your bed partner, roommate, or family may hear you:

- Snore loudly
- Choke
- Gasp for air

Signs of OSA you may notice are that you:

- Wake up with a dry mouth
- Need to go to the bathroom often at night
- Feel sleepy during the day
- Have headaches in the morning
- Have memory problems
- Feel irritable, depressed, or have mood swings

**How does OSA relate to my surgery?**

OSA may increase your risk of having problems during and after your surgery because:

- You may already have some of the long-term health problems related to OSA, such as high blood pressure or heart problems. These problems may increase the risks of surgery.
- For your surgery, you may receive general anesthesia, drugs that will make you “sleep.” If you have general anesthesia, you may have a tube placed in your throat to help you breathe. The tube may be harder to put in for people with sleep apnea.
- Your OSA may get worse before and after surgery:
  - Many people do not sleep well before their surgery. Lack of sleep can make OSA worse.
  - Anesthesia used during surgery can lower the amount of oxygen in your blood. This may increase how many OSA episodes you have and how long they last.
  - When the breathing tube is removed after surgery, your throat may be swollen. This can make your sleep apnea worse.
  - During your stay in the recovery room, the medicines you were given during surgery may still affect you. These medicines may make you sleepy and keep you from breathing normally. This can lower the amount of oxygen in your blood and make your sleep apnea worse.
  - Pain medicines may also affect your breathing.

What can I do to lower my risk for problems related to my sleep apnea?
If you have sleep apnea, or think you might have it:

- **Tell your surgical team.** Your doctors may be able to use medicines that are less likely to make your sleep apnea worse. They will also increase monitoring of your breathing during and after your surgery. They may decide not to put you on your back for your surgery if your OSA is worse when you sleep on your back.

- **Your surgical team may refer you to a specialist in sleep medicine.** This specialist may advise you to have a sleep study. This may be an overnight study at a sleep laboratory, or you may use a portable monitor at home. If you do have OSA, your surgical team needs to know if it is mild, moderate, or severe. They also need to know and if it is worse when you sleep on your back.

- **You may want to have your OSA treated before your surgery.** Treatments include:
  - Using a continuous positive airway pressure (CPAP) machine
  - Using a device that fits in your mouth while you sleep
  - Surgery

CPAP is the most common and effective treatment for OSA. The CPAP machine pushes room air through a mask into your nose or mouth while you are asleep. The air pressure keeps your airway open.

**Be sure to talk with your surgical team about the risks of sleep apnea and surgery.** This will help them provide the best care for you.