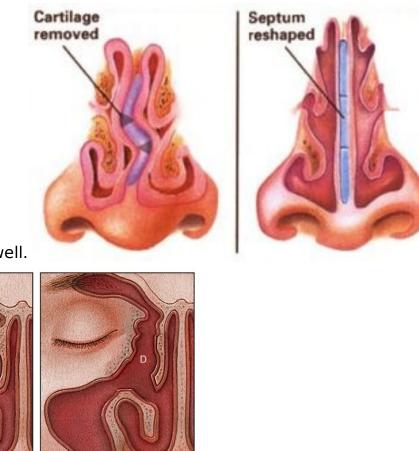
Sinus Surgery Survival Guide

What to Expect and How to Prepare

What is Endoscopic Sinus Surgery? Endoscopic sinus surgery is a minimally invasive procedure designed to treat chronic sinusitis and other sinus issues. Using an endoscope—a thin tube with a camera and light— surgeons can access and clear sinus blockages through the nostrils without external incisions. This procedure aims to restore normal sinus drainage and function.

How It Differs from SeptoplastySeptoplasty, on the other hand, is performed to correct a deviated septum, the bone and cartilage that divide the nasal cavity. This procedure straightens the septum to improve airflow and breathing. While both surgeries involve the nasal passages, their goals are distinct: endoscopic sinus surgery focuses on clearing sinus blockages, whereas septoplasty aims to correct structural issues within the nasal cavity. Septoplasty and inferior turbinate surgery alone are usually considered "nasal surgery," which is less extensive and primarily addresses congestion and airflow improvement. Often times in sinus surgery we will also perform a



septoplasty as well.

C: Portions of sinus removed

Before surgery

After surgery

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Recovery and Post-Operative Care

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Bleeding and ManagementAs discussed in the office, bleeding from the nose is expected during recovery from sinus surgery. Spotting blood for the first few days is normal, with the first day being the worst. If you're changing your mustache dressing every 1-2 hours and it's not heavily soaked, that's normal. However, if you're soaking through the dressing within 5-10 minutes, contact your surgeon immediately.

Using Oxymetazoline (Afrin)

Oxymetazoline can help reduce bleeding, but it won't eliminate it entirely, especially on the first day. Your nose will be packed with various materials, limiting spray penetration. Pour a generous amount into each nostril, tilt your head back slightly, and pinch your nose for 10-15 minutes. This allows blood to pool and clot, applying pressure internally to slow bleeding. Opt for liquid sprays over aerosolized versions for better penetration around packing materials. Brands like Perrigo are recommended and available on Amazon for about \$10. Don't worry about overuse; Afrin is safe to use 3-4 times per day for the first few days post-surgery.



Mustache Dressing Mustache dressing is an absorbent dressing placed under the nostrils to manage drainage. Use 4x4 gauze and tape for changing your dressing as needed. You can purchase mustache dressings at most pharmacies or online stores. Keep your head elevated when sleeping to reduce bleeding and prevent blood from dripping onto your clothes or bedding.

Nasal Saline Rinses Nasal saline rinses are crucial for keeping the nasal passages clean, reducing crusting, and promoting healing. Perform rinses as instructed, often 2-3 times a day using a NeilMed bottle. Initially, it might be challenging due to the splints, but try your best. Water entering the nasopharynx can make your ears feel like they are underwater due to temporary obstruction of the Eustachian tube. Clots and dried crusts coming out during rinses are normal.

Saline rinses are extremely important for healing as they help keep the sinuses moist and remove crusting and debris. Once the packing is removed, rinses become even more crucial since the cavities will be exposed to more air, leading to potential crusting. Rinsing helps remove crusts, and some light bleeding as healthy tissue is exposed is beneficial for healing. Rinses also help keep the crusts moist, making debridements more effective and can

relieve congestion by removing debris. Patients cannot overdo the rinses; in fact, the more they do, the better. Twice a day is required, but 4-6 times is best, and more if desired.

Types of Nasal Packing

Different types of nasal packing may be used to support nasal structures and



reduce bleeding:

- **Doyle Splints:** These are made of silicone and have a tube to help patients breathe. They keep structures in the right place to heal properly and limit scarring. Doyle splints are removed at the patient's first post-operative visit.
- **Dissolvable Packing (like PosiSep):** These packings help with healing and controlling bleeding. They dissolve over time and can be rinsed out with saline rinses. Much of this packing will be removed during postoperative debridements to expedite healing and reduce a sense of congestion.

We no longer use strip gauze packing, which was common years ago and often discussed as painful to remove in forums. Modern packing methods like Doyle splints and dissolvable packing provide better outcomes with less discomfort.

Managing Pain

Pain management is essential for a smooth recovery. I use multimodal pain treatments and do not prescribe combination pain medications so that patients can have more control over their pain. Tylenol (acetaminophen) and NSAIDs like ibuprofen are metabolized differently (liver and kidney, respectively) and can be taken during the same period with minimal side effects.

Tylenol: Max dose is 4g per day. Take 1000 mg every 8 hours. Any form of Tylenol is acceptable as long as you are aware of the dosage.

Ibuprofen: An NSAID; other examples include naproxen and aspirin. The highest dose is 800 mg every 8 hours, but it can cause stomach upset at that dose. I prefer 600 mg or 400 mg every 8 hours. Alternate between ibuprofen and Tylenol every 4 hours, maintaining an 8-hour interval between doses of the same medication.

If this regimen does not control the pain, **oxycodone** is available as a breakthrough medication. You can take either a full tablet or half, depending on your preference. Pain from sinus surgery is generally not very severe, and most patients manage well with Tylenol and ibuprofen alone. Some patients may need oxycodone, but pain usually subsides after a few days.

Post-Operative Symptoms

Common Symptoms

- **Nasal Congestion:** Expect some congestion due to swelling and packing materials. This will improve as you heal and follow your nasal saline rinse routine.
- **Minor Bleeding:** Spotting and minor bleeding are normal, especially during the first few days. Follow the bleeding management tips provided.
- **Swelling and Bruising Around the Eyes:** Some swelling around the skin of the eye can occur due to the way the sinuses drain fluid after surgery. Not everyone develops this, but it can happen. Usually, there is some puffiness around the eye, which can cause some bruising. As long as it's just the eyelid and skin around the eye, it's fine. However, if the eyeball itself is bulging, very red, or tender, please contact your surgeon immediately.
- **Pain and Discomfort:** Manageable with the prescribed pain management regimen. Most patients do well with Tylenol and ibuprofen alone.

When to Contact Your Surgeon

- **Heavy Bleeding:** If you're soaking through a dressing within 5-10 minutes.
- Severe Pain: Uncontrolled by the prescribed pain regimen.
- **Signs of Infection:** Increased redness, swelling, or drainage from the surgical site, or a fever over 101°F.

Post-Operative Care with Debridements

Importance of DebridementsRegular follow-up visits for debridements are crucial. During these visits, your surgeon will remove crusts and debris from the sinuses to promote healing, reduce the risk of infection, and ensure the sinuses remain open and healthy. Debridements are also important because they allow the surgeon to monitor the healing process closely and address any issues promptly.

Follow-Up Schedule

- **1 Week Post-Op:** The first follow-up visit typically includes debridement and removal of Doyle splints.
- 2 Weeks Post-Op: Another debridement session to ensure the sinuses are healing well.
- 6 Weeks Post-Op: Further evaluation and debridement if necessary.
- **12 Weeks Post-Op:** Final check-up to ensure everything has healed properly.

Some patients may need to be seen more frequently, depending on their individual healing process. Each of these follow-ups is crucial for overall healing. Rinsing regularly helps keep crusts soft, making them easier to clean out during these visits.

Over-the-Counter Items to Purchase

Before your surgery, you can purchase the following over-the-counter items to aid in your recovery:

Tylenol/Acetaminophen: For pain management.

Ibuprofen: Another option for pain management.

Mustache Dressing (gauze and tape): For managing drainage.

NeilMed Sinus Rinse: For nasal saline rinses.

Afrin: To help reduce bleeding.

Humidifier: Optional, but some patients find it helpful as long as it is kept clean.

Most of these medications can be bought over the counter at any pharmacy, but here are some links to Amazon for convenience:

Oxymetazoline (Afrin): Link to Amazon NeilMed Sinus Rinse: Link to Amazon Gauze: Link to Amazon

Silk Tape: <u>Link to Amazon</u> Prescription Medications

On the day of your surgery, I will prescribe the following:

Antibiotic: To prevent infection.

Narcotic Pain Medication: For breakthrough pain.

Steroids (if needed): To reduce inflammation from surgery and also helps with pain