

## **ENDOSCOPIC SINUS SURGERY +/- SEPTOPLASTY AND INFERIOR TURBINATE REDUCTION**

**Angelique M Berens, MD**

Endoscopic sinus surgery (FESS) uses minimally invasive techniques to remove the delicate bones that divide the sinus cavities into smaller spaces. FESS decreases the severity and frequency of sinus infections.

Septoplasty (straightening the nasal bone/cartilage) may be done at the same time as FESS to improve access to the sinuses and/or improve your breathing. The inferior turbinates are reduced to help with nasal breathing for those that have enlarged turbinates or allergies.

These procedures can be done in the clinic with sedation or in the operating room under anesthesia. Surgery takes between one and four hours depending on the complexity of the case.

Typical recovery time less than one week. Although you will be feeling well within the first couple of days, you may be tender and may have a nasal congestion for up to one week.

### **BEFORE SURGERY**

1. Only take Extra Strength Tylenol® for aches and pains, starting at least 14 days before surgery. It is very important NOT to use any aspirin, aspirin containing compounds or non-steroidal anti-inflammatories (i.e. ibuprofen, Motrin®, Advil®, Aleve®, Celebrex®, etc). These all work by thinning your blood, and can cause increased bleeding during surgery and increased bruising after surgery.
2. Do not take vitamin E supplements, fish oils, omega-3 supplements, or herbal supplements, such as garlic, ginkgo, glucosamine, or ginseng. for at least 14 days prior to the procedure. These supplements may also increase bleeding and bruising. A prepackaged multivitamin product (such as One-A-Day® or Centrum®) is okay.
3. Please discuss use of any blood thinners (Coumadin®, warfarin, Plavix®) with Dr. Berens. Blood thinners are usually held for several days before the procedure.
4. Prescriptions for after the procedure may include antibiotics, pain medications, anti-nausea medication, and/or steroids.
5. Please have the following items at home for your recovery:
  - Nasal irrigation (rinsing the nose) supplies: salt packets and distilled water,
  - Afrin®, and
  - Antibiotic ointment (bacitracin, Neosporin® or Polysporin®).
6. Smoking impairs wound healing. Stop smoking four weeks before and after surgery. Use of nicotine substitutes (patches/gum/vape) should also be avoided.
7. If you wear contact lenses, do not wear them the day of surgery. Instead, wear your glasses. Most patients wait several days after surgery to resume wearing contact lenses due to swelling.

### **DAY OF SURGERY**

1. Wear something that is easy to get on and off. For example, a button-down or zippered shirt, which you do not have to pull over your head.
2. Make sure you have someone to drive you home and stay with you for the first 24 hours.

### **IMMEDIATELY AFTER SURGERY**

1. At first, you may not be able to breathe well through your nose. If you had a septoplasty, you may have splints sutured inside of your nose.
2. Change the “mustache” gauze dressing as needed. It is normal to change the gauze every 30 – 60 minutes. It is expected to have bloody drainage on the gauze when it is changed. The drainage will slow down overnight, but may last for up to three days. Bloody drainage when irrigating is normal for the first one to two weeks.
3. Use alternating Tylenol® and ibuprofen for pain control. Always check to make sure the dose is appropriate for your age/weight and that you take no more the maximum recommended dose during a 24 hour period (e.g. maximum of 2400mg of ibuprofen, 4000mg of Tylenol®/acetaminophen for an average sized adult in a 24 hour period).
4. If you have been prescribed a narcotic pain medication, use only if needed - if ice, Tylenol® and ibuprofen do not improve the pain to a tolerable level. Narcotics have some serious side effects such as nausea, vomiting and slowed breathing. Use of narcotics can increase your risk of complications such as hospitalization and death, particularly if you have sleep apnea. Avoid alcohol or other drug use while taking prescribed pain medications.

### **AFTER SURGERY**

1. Nasal irrigation keeps the nasal passages clean and moist. It is a more effective method than saline sprays. Start nasal irrigation the evening of the surgery. Continue nasal irrigation four to five times a day for the first several weeks until your follow-up appointment. If you have nasal polyp disease, irrigate with a steroid formulation (e.g., budesonide) twice a day.
2. For excess nasal bleeding, use Afrin® (over the counter) two to three times per day. Do not use for more than three days in a row.
3. Apply antibiotic ointment (mupirocin) with your pinkie finger to the inside of your nostrils twice a day. This will help keep the nasal cavity and sinuses moist.
4. Do NOT blow your nose until after the first follow-up appointment. Open your mouth when you sneeze.
5. Avoid alcoholic beverages while taking antibiotics.
6. You may restart any medications you stopped prior to surgery (e.g., fish oils, aspirin, warfarin) the day after your procedure.
7. Keep your head above your heart and avoid strenuous activity for the first one to two weeks. Sleep with your head elevated for the first three nights.
8. It is okay to shower the day after surgery.
9. The internal dissolvable stitches will start to come out one to two weeks after the surgery. Do not be alarmed if, when you sneeze, small portions of the stitches are visible or come out. You may also sneeze or cough up a white plastic spacer.
10. If you receive sedation / an anesthetic the day of your surgery DO NOT drive a vehicle, use alcoholic beverages, sign legal documents, take public transportation alone or care for a dependent person for the next 24 hours.

## **Recovery Timetable**

Day 1: Mild discomfort, pain along teeth, and dripping of blood from nose.

Day 2-3: Maximum pain, but the bleeding will begin to slow down.

Day 7: Post-operative visit for a wound check and evaluation of sinuses.

Day 14: Post-operative visit for a wound check and evaluation of sinuses.

Month 3: Final post-operative visit.

Please call the office for any of the following:

- Any questions and/or concerns.
- Significant increase in pain or swelling.
- Temperature over 101°F or purulent drainage.
- Change(s) in vision.
- Excessive bleeding (i.e., saturating six double 3x3 gauze pads in one hour)

During business hours please call the office at (360) 454-1941. After hours a doctor can be reached at (425) 258-9000.

If you cannot reach our office for any reason present to the emergency department for evaluation of any life or vision threatening concerns.

## **RISKS**

**Vision Loss:** Bleeding behind the eye can occur. This complication is extremely rare and increased by poorly controlled high blood pressure, bleeding disorders and medications that increase bleeding. If excess bleeding behind the eye occurs, emergency surgery is required to stop the bleeding and save the vision.

**Cerebral Spinal Fluid Leak:** Leaking of the fluid around the brain can occur if a surgical instrument enters the brain cavity. Additional hospitalization and/or surgery may be needed to repair the leak and decrease the risk of meningitis.

**Muscle Injury and Double Vision:** Damage to eye muscles can happen if a surgical instrument enters the area around the eye. This can result in double vision and swelling. The vision change usually resolves one to two weeks after the swelling improves but could require further surgery.

**Bleeding:** Bleeding from the nose for several days after surgery is normal. In rare circumstances, additional surgery is needed to stop severe nose bleeds.

**Infection:** Sterile technique is used, but there is always a risk of infection with surgery. An infection may require further surgery and/or antibiotic treatment. The risk of infection is increased in diabetics and the immunocompromised.

**Septal perforation:** Holes in the nasal septum can happen after a septoplasty. This is uncommon but may require further surgery to repair.

## **ADDITIONAL ADVISORIES**

Long-Term Results: FESS will not cure chronic sinus disease. The goal of this procedure is to improve the drainage of your sinuses and allow for saline irrigation to remove infections. Therefore, it is possible to continue getting sinus infections after the procedure. However, they will be less common and less severe. Steroids, antibiotics and/or antifungals may need to be added to your sinus irrigations for long-term treatment. Continued use of nasal steroids (e.g., Flonase® or Nasocort®)) may also be recommended for maintenance.

Female Patient Information: It is important to inform your surgeon if you use birth control pills, estrogen replacement, or if you suspect you may be pregnant prior to your surgery. Many medications (i.e., antibiotics) may stop the preventive effect of birth control pills, allowing for conception and pregnancy.

### **PART OF BEING WELL IS BEING HEARD**

Do you have an experience, feedback, or advice that you would like to share with me or with other patients? Consider sharing your feedback on the following platforms:

#### **GOOGLE REVIEWS**

These reviews will help patients who use Google to learn more about their physician. It is helpful to use the name of your procedure in the review.

1. Go to: [google.com/maps](https://google.com/maps)
2. Search: Angelique Berens
3. Scroll to the very bottom on the left and click “write a review”
4. Write details about your experience or advice for future patients!

#### **EVERETT CLINIC FEEDBACK SURVEYS**

Help us understand what works well so that we can improve the experience for the next patient. We share comments left in the provider section online on [everettclinic.com](https://everettclinic.com) for our providers' profiles.

1. Go to [www.EverettClinic.com/give-us-your-feedback](https://www.EverettClinic.com/give-us-your-feedback)
2. Share your advice and/or feedback about your experience!

#### **REALSELF.COM**

This Seattle-based website makes sure the reviews and physicians are verified. They do ask for some personal information from you, but they never share it.

1. Go to [www.realself.com/review/write](https://www.realself.com/review/write)
2. Select “Treatment: Endoscopic sinus surgery”

3. Insert “Angelique M Berens, MD” for the provider
4. Share your thoughts!