

## **Patient Handout for Computer assisted endoscopic sinus surgery**

### **What is Chronic Sinusitis?**

Chronic sinusitis is the result of ongoing inflammation/infection of the lining of the sinuses. This results in developing one or more of the following symptoms: Chronic fatigue, facial pain/pressure, poor sense of smell, facial congestion, nasal obstruction, nasal discharge and/or post nasal drip. If left untreated, this disease has been shown to progressively worsen leading to a reduced quality of life.

### **How does it develop?**

Multiple factors can lead to its development and include: abnormal variations in anatomical structures within or around the sinuses, viral/bacterial infections, environmental allergies, genetic factors, and possible presence of fungi in the sinuses.

### **How can it be treated?**

Due to its multifactorial etiology, both surgical and medical treatment options are needed to control this disease. Medications alone (without sinus surgery) have been used in the past and unfortunately do not have the ability to treat this disease in the majority of cases due to the reasons mentioned above. Medications include: Antibiotics, steroid nasal sprays, decongestants, antihistamines, etc.

### **What does Endoscopic Sinus Surgery involve?**

The surgery involves the use of cameras and microscopic instruments through the nostrils to operate on the sinuses. There will be no facial cuts or bruises. The aim of surgery is to remove the diseased tissue blocking the sinuses while preserving the lining of the sinuses. We use state of the art navigating computers to continuously evaluate your scans ensuring a comprehensive job is done. Commonly, you go home on the same day.

With surgery, 90% of patients will no longer have prolonged symptoms and will only occasionally require medications to treat a flare up of the disease. The remaining patients will also have an improved quality of life however will require close follow-up and ongoing treatment and/or surgery depending on the severity of their disease.

### **What to expect from Endoscopic Sinus Surgery?**

#### **Prior to surgery**

- You will be notified of the surgery date and time by our nursing staff via telephone and/or mail.

- You will be given a prescription of an oral antibiotic and prednisone (steroid) to be started a week prior to surgery for two weeks.
- Your family physician is responsible to provide your general medical history, physical examination and investigations (blood work, EKG, chest x-ray) prior to your surgery.
- For preoperative specific instructions, kindly check Dr. Javer's website (<http://www.drjaver.com/patients/instructions-information>)

### **Day of surgery**

- You will be admitted to the outpatient surgical department at either St. Paul's hospital or False Creek Surgical Centre
- Dr. Javer or his fellow/resident will meet you after admission to ensure everything is in-order and mark the skin overlying the area that will be operated
- You will be transported to the operating room where you will meet the other members of the sinus surgery team. Feel free to ask questions at anytime during this process.
- After surgery, you will have a sinus spacer in each nostril (and possibly a septal splint depending on your surgery).
- The tip of the nose may be tender as splints are sutured to your septum. Avoid pulling on the sutures as this may cause more pain and discomfort.
- You will be able to breathe freely through the nose.
- A small moustache dressing may be placed to capture blood which we expect to trickle from our nose.
- You will be in the recovery room for 1-4 hours after which you will likely feel well enough to go home.

### **Days after surgery**

- **Bleeding:** you should expect to have bloody nasal discharge for 3-5 days after surgery. This will lessen with time.
- **Facial Pain:** this commonly occurs after surgery. Try to avoid aspirin or similar anti-inflammatory products (e.g. Advil) as they may worsen bleeding. Over the counter acetaminophen containing products (e.g. Tylenol) should be sufficient to control the pain. However, you will also be given a prescription of stronger pain medication the time of surgery if the above was not sufficient. If the pain progressively worsens despite the measures mentioned above, please call or email us.

- Throat pain: this can result from breathing tube placement by the anesthesiologist during the time of surgery. It usually resolves spontaneously within a few days.
- Fatigue: you may feel a general sense of tiredness after being put to sleep for sinus surgery. This improves after approximately 1 week.
- Office visits:
  - First visit (4-7 days after surgery): the spacers and/or splints along with bloody debris from within the sinuses will all be removed to optimize healing and avoid infections.
  - Second visit (4-5 weeks after surgery): Your sinuses will be checked and minor in-office procedures may be needed to further optimize healing (e.g. scar division, sinus flushing).
  - Third visit onwards: will be decided depending on your healing status and need for close follow-up.
- For postoperative specific instructions, kindly check Dr. Javer's website (<http://www.drjaver.com/patients/instructions-information>)

### **Risks of Surgery**

- Infection: uncommonly after surgery, the sinuses may become re-infected which would necessitate topical or oral antibiotics as well as frequent office debridement and irrigation.
- Scarring: Scarring can occur around the sinuses after surgery in 5-10% of cases. This is monitored during your postoperative visits and will be dealt with if seen with a minor in-office procedure.
- Bleeding: trickling of blood from the nostrils for 3-5 days post surgery is expected. Rarely, continuous bright red bleeding can occur. Call or email us immediately if this happens.
- Brain fluid leakage: this operation is done close to the brain. If the bone separating the brain from the nose is injured, then clear fluid (CSF) that surrounds the brain may leak out via the nostrils. This can lead to meningitis (infection of the lining of the brain) if this was not dealt with during the surgery. The risk of this occurring with the current technology in our center is <0.5%. Also, if this occurs, we are fully capable of repairing any leaking sites with no foreseeable permanent damage.
- Eye injury: These sinuses are fairly close to the eyes as well. Damage may result in temporary or permanent visual and/or tearing issues. The risk of this occurring with our current technology in our center is also <0.5%.

- Recurrence of disease: occasionally with severe disease (e.g. allergic fungal sinusitis), the sinuses require more extensive surgery and medical treatment than is normally done. These patients may have recurrence of their disease necessitating repeat surgery at some point in their future.
- Septal perforations: If you had nasal septal reconstruction (deviated segments of bone and cartilage separating the two nostrils are re-aligned), there is a slight (<5%) risk of perforations (connection between both nostrils on the inside). This usually is asymptomatic and does not require treatment. In rare occasions, this might lead to crusting, bleeding, or a whistling noise and can be corrected surgically if that occurs.

Please contact us at anytime at [sinusdoc@me.com](mailto:sinusdoc@me.com) or Pager # 604-252-4793

**Warren Mullings**