



COMPLICATIONS OF NASAL AND SINUS SURGERY

INTRODUCTION

Surgery of the nose or sinuses may be offered if medicine such as antibiotics, nose sprays, or steroids do not make a patient better. All types of surgery have risks, including surgery of the nose and sinuses. Patients must be aware of these risks before electing to proceed and weigh the benefits of the procedure against the risks involved. A discussion regarding the risks, benefits and possible alternatives to surgery between the patient and surgeon is strongly encouraged.

Some of the more common or more important risks relative to nasal and sinus surgery are discussed below.

COMPLICATIONS OF NASAL SURGERY

The nasal septum is the wall (made of cartilage and bone) that divides the left side of the nose from the right side of the nose. Turbinates are a normal part of the inside of the nose. Their job is to filter and humidify air passing through the nose. Complications from nose surgery may include:

Bleeding: It is normal to have a small amount of bleeding after surgery on the nose and/or turbinates. If there is a lot of bleeding, your surgeon may have to look inside your nose and stop the bleeding. Sometimes this can be done in the office, but rarely this may have to be done in the operating room. There are a few things that may increase your chance of bleeding. Non-steroidal anti-inflammatory agents (NSAIDS, such as aspirin or ibuprofen) and certain over-the-counter (OTC) supplements such as vitamin E and ginkgo can increase the risk of bleeding, so patients should talk to their doctor about the use of *any* medications before or after surgery. If the bleeding causes a hematoma (blood clot) within the septum, this will need to be drained. This can lead to changes in the outside appearance of your nose if it is not drained.

Impaired sense of taste or smell: The sense of smell may get better after the procedure due to better airflow, although it could worsen depending on the extent of swelling, infection, or allergy. This impairment is often temporary.

Nasal obstruction: Much of the nasal septum is made of cartilage. Although measures are taken to prevent this at the time of procedure, the cartilage potentially could move back to its original position after surgery. Surgery typically improves airflow, but in some patients it may not improve or rarely may worsen. Small scar bands may also occur in the nose and require removal by the surgeon.

Numbness: Numbness of the front upper teeth, lip or nose may occur after surgery but is usually self-limiting and does not require further treatment.

Change in appearance: The septum contributes to a significant portion of the bridge of the nose and the base of the nose near the upper lip. Although surgery on the septum alone typically doesn't change the appearance of the outside nose, such changes are possible.

Pain and dryness: The turbinates are a normal part of the inside the nose that filter and humidify air passing to the lower airway (lungs). They often become too enlarged and their size is reduced during nasal surgeries, and this often improves symptoms such as nasal congestion and obstruction. However, in rare patients this reduction can leave the patient with the sensation of being overly dry or even causing chronic pain; a very rare but severe form of this is referred to as “empty nose syndrome” or atrophic rhinitis (See Empty Nose Syndrome).

COMPLICATIONS OF SINUS SURGERY

The sinuses are air-filled structures inside the bones of the face that produce and drain mucus into the nasal cavities. Complications from sinus surgery may include:

Intraorbital complications: (damage to the eye or surrounding tissue): The orbit is the cavity that houses the eyeball and its associated structures and is situated adjacent to the sinuses and is separated from them by a thin layer of bone. Because of the close proximity, in rare cases, bleeding may occur into the orbit requiring treatment at the time of the initial surgery. Visual loss and blindness have been reported but are extremely rare. Another uncommon problem is damage to the muscles that move the eye leading to double vision, which can be temporary or permanent. In certain circumstances, there may be a change in the function of the tear ducts causing excessive tearing. Since the eye is in close proximity to the sinuses, it is also possible for a major orbital complication or visual loss to occur even *without* surgery for patients with severe or refractory sinus infections.

Intracranial Complications: The intracranial cavity and sinuses are in close proximity, the roof of the sinuses is the floor of the skull. If this thin bony layer is fractured, brain fluid can leak into the nose. While rare, this is likely to be identified and repaired in the operating room at the time of the primary surgery. In rare cases, this could lead to infection of the lining of the brain (“meningitis”), bleeding into the brain or the need for further intracranial surgeries.

Voice changes: One of the functions of the sinuses is to affect resonance, so vocal professionals should be aware of potential changes in their voice after sinus surgery.

Impairment of smell or taste: (see above)

Infection: The most common reason to undergo sinus surgery is a chronic sinus infection that does not resolve with medications. The patient with sinusitis is therefore at risk of developing certain other infections in this area (abscesses, meningitis, etc.) from sinus surgery, although it important to recognize that this is also a potential complication of *not* undergoing surgery for a refractory chronic sinus infection.

Nasal obstruction, dryness and pain: (see above)

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