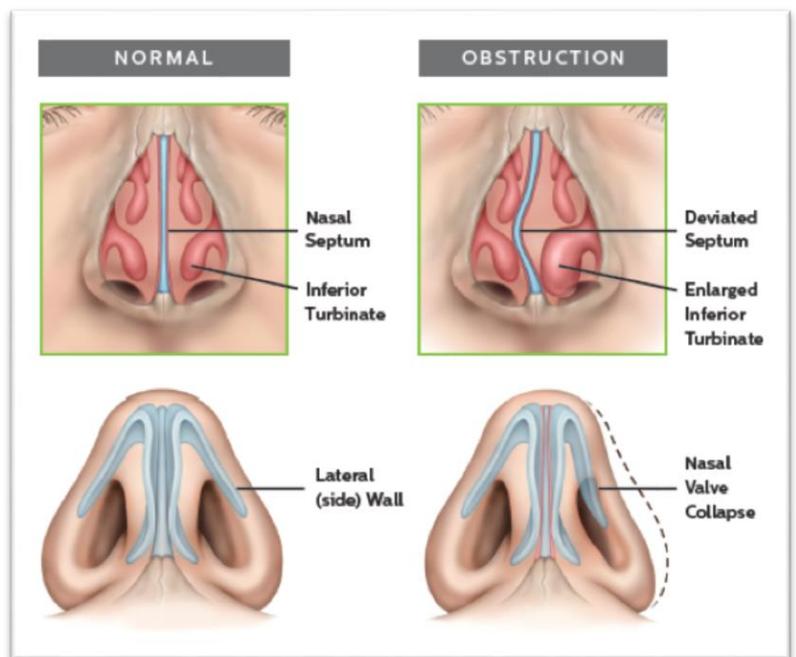


Why Can't I Breathe Through My Nose!?

Nasal obstruction is the most common nasal-related complaint in adults. In children, if you ask the right questions, you'll find it to be extremely common in this group as well. In short, nasal obstruction results from inadequate airflow. Think of the nasal airway as two pipes laid side by side that drain into a single, larger pipe "downstream". Each pipe is lined with a covering called a mucous membrane (or mucosa for short) – which is a membrane that produces mucous. The two pipes' openings represent the nostrils and the length of pipes represents the nasal cavity. The larger pipe that is drained into represents the nasopharynx—the single, large cavity that drains the two nasal cavities. The common wall between the two smaller pipes is the nasal septum. This is made of cartilage in the front and bone in the back. You can feel your own septum by putting your index finger in one nostril (doctor's orders!) and your thumb in the other. The firm sheet of tissue you can wiggle back and forth is the front of the nasal septum. Directly opposite the common wall, along the outer wall of the pipe/nasal cavity runs a lengthwise bulge of tissue called the inferior turbinate. This structure is made of a thin bone wrapped with a mucous membrane filled with a spongy tissue called submucosa. Submucosa is filled with blood vessels which can congest and decongest rapidly. The inferior turbinate serves as a radiator for the nose, heating and humidifying the air that you breathe. Further back in the nasal cavities, along the nasal side walls, is another structure called the middle turbinate. Similar in shape but smaller than the inferior turbinate, the middle turbinate is a leaflet of thin bone partially covering the common drainage pathway of the nasal sinuses which lie to the sides of the nasal cavity.



So, how does this relate to nasal obstruction anyway?

Any and all of the anatomical structures described above can cause nasal obstruction, but the single most common cause of nasal obstruction is inflammation or swelling of the nasal mucosa. The most common cause of mucosal inflammation, apart from viral-induced swelling, is nasal allergy, also known as allergic rhinitis. Allergic rhinitis can be intermittent (seasonal) or persistent (perennial). The single most effective treatment, other than avoidance of the irritant, is a nasal steroid (such as Nasonex™) which decrease and



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prevent swelling. Nasal steroids are safe for ages 2 and up often for both intermittent and persistent allergy. When medications fail, we must look at the anatomy, the “plumbing”, to find the source of the problem.

A deviated septum is a condition where the “common wall” between the two nasal cavities is off-center and leans to one side- this causes one nasal cavity to become more narrow. Unfortunately, this condition does not respond to medication

and can lead to other issues such as recurrent nose bleeding. Fortunately, septoplasty, the procedure to straighten a deviated septum, is a straightforward, minimally-invasive, 45-minute procedure, done under general anesthesia which involves no facial swelling or bruising, nasal packing, or external incisions.

The inferior turbinates can become misshapen as well. This condition, called inferior turbinate hypertrophy, causes nasal obstruction that is often variably present and often worse when laying down. Caused by excessive soft tissue and bone growth, inferior turbinate hypertrophy can often be lessened with nasal steroids. However, when these fail to provide relief, surgery offers an excellent option. Often combined with septoplasty, endoscopic inferior turbinate submucous resection involves removing bulky turbinate tissue from the inside of the turbinate through a 5-mm incision inside the nose.

Children with nasal obstruction require an evaluation of the adenoids as well as the inferior turbinates. The adenoids can be examined in the office without sedation using a thin fiberoptic camera which affords us an excellent view of the adenoids in the nasopharynx. Alternatively, a lateral neck X-ray can often reveal large adenoids. Large adenoids, also known as adenoid hypertrophy, can sometimes be “shrunk” with nasal steroids. When medicine is ineffective, adenoid tissue removal, also known as an adenoidectomy, is a minimally-invasive 10 min procedure that is performed under general anesthesia.



With so many modern, minimally-invasive medications and procedures, no one should have to suffer from a “blocked” nose again!

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