



الشراكة الطلابية

# مشروع التثقيف الصحي Health Education Project

## Nasal Obstruction In Children

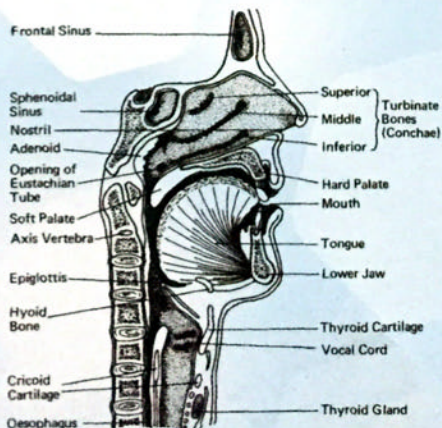


# The Nose

The nose has two holes called nostrils. The nostrils and the nasal passages are separated by a wall called the septum deep inside your nose. Behind your nose, in the middle of your face, is a space called the nasal cavity. It connects with the back of the throat. The nasal cavity is separated from the inside of your mouth by the palate (roof of your mouth).

The inside of your nose is lined with a moist, thin layer of tissue called a mucous membrane covering the bony projections (turbinate). This membrane warms up the air and moistens it. The mucous membrane makes mucus, that sticky stuff in your nose which captures dust, germs, and other small particles that could irritate your lungs. Also there is hairs that can trap large particles, like dirt or pollen. If something does get trapped in there, You will sneeze. Sneezes can send those unwelcome particles out.

Further back in your nose are even smaller hairs called cilia that you can see only with a microscope. The cilia move back and forth to move the mucus out of the sinuses and back of the nose.



Section through the nose and throat.

# Nasal Obstruction in Children

## What is nasal obstruction?

Nasal refers to the nose. Nasal Obstruction is a partial or complete blockage of one or both of air passages (nasal cavity).

## What are some of the symptoms of nasal obstruction?

In an infant:

Is usually noted very soon after birth. Infants primarily breathe through the nose, so any blockage of this passage will be seen early on as difficult and noisy breathing. When these children cry, their breathing actually improves, as air can move in and out of the mouth without problems. Breathing problems will be especially noticeable during feeding.

In older children:

Nasal obstruction usually results in noisy breathing, snoring, and/or mouth breathing. Your child may or may not have a runny nose as well. Mouth breathing can go unnoticed by many parents. One trick to noticing this is to look back at previous pictures of your child to see if the mouth is always open.

## The Causes of Nasal Obstruction

### (Rhinitis)

Swelling or inflammation of the lining of the nose can be caused by allergies, irritants like smoke, pollution and infection.



## (Adenoid hypertrophy)

What is adenoid hypertrophy ?

Adenoid hypertrophy means adenoid enlargement. The adenoid is a lump of tissue at the back of the nose above the tonsils . It's basically a lymph node which contains "lymphocytes", cells that help to fight infection.

In most children, the adenoid enlarges normally during early childhood, when infections of the nose and throat are most common. They usually shrink as the child gets older and disappear by puberty. However, in some children, the adenoid continues to become larger and block the passage behind the nose.

What are the symptoms of adenoid enlargement ?

Snoring, mouth breathing, a hyponasal sound (sounds like talking with a stuffed nose). Also, can result in middle ear infections because of blockage of the Eustachian tube (the tube that connects the ear to the throat).

How to diagnose it ?

With a flexible camera (flexible fibroptic scope) in the nose or an x-ray.



## Foreign Body

A common cause of nasal obstruction in the younger child is an object (foreign body) placed in the nose (such as a bead, peanut, cotton, etc) during experimentation or play. These patients usually develop a foul smelling drainage from the nose on the side containing the object.

## **(Deviated Nasal Septum)**

A child may be born with a crooked (deviated) septum, or may acquire a crooked septum through injury to the nose. If this tissue is severely twisted, it can block the nasal passage. This is commonly corrected with surgery called a septoplasty.

## **(Nasal Polyps)**

A nasal polyp is a growth of tissue that protrudes from the sinus lining into the nasal passage. Because polyps are usually the result of a chronic irritation (allergy) or infection, a complete evaluation, including CT-scan, is necessary to diagnose the cause and determine the extent of the problem.

## **(Hematoma)**

Injury to the nose can also result in a hematoma (collection of blood) that may obstruct the nasal passage. This commonly occurs after a trauma to the nose and must be treated immediately or loss the support of the nose will result.

## **(Tumors)**

Among the other less common causes of nasal obstruction in children are benign or malignant tumors, which may be noted initially by persistent stuffiness on one side of the nose. This may also be associated with bleeding, drainage or swelling.

## **(Choanal atresia)**

It can be one sided (unilateral) or affect both sides (bilateral). It means that the back opening of the nose is blocked with either tissue or bone. If both sides are involved, it is usually noted shortly after birth. In this case, surgical repair is needed immediately to allow the child to breath normally. If only one side is involved, the diagnosis may be made much later in life. Symptoms include nasal discharge, stuffiness only on one side and sometimes, one-sided sinusitis.



# Complications

- 1 – keep the mouth open during the oral breathing for long periods of time cause delay and distort growth of the jaw. leading to the need for orthodontic after a period of time.
- 2 – In severe cases, the chronic lack of oxygen causes a rise in blood pressure and therefore heart enlargement.
- 3– When the obstruction severe enough it may leads to disruption during sleep and the so-called obstructive sleep apnea.
- 4– Growth problem in general because of the difficulty of breathing while eating & sleeping.
- 5– Difficulties in speech.
- 6– Nasal obstruction leads to obstruction of the Eustachian tube leading to middle ear infections and fluid collected behind the eardrum.
- 7– Nasal obstruction, especially nasal polyp, prevent the discharge from getting out through the nose which leads to the accumulation and getting to the throat and lungs. This leads to inflammation of the throat and in addition recurrent chest infections and recurrent chest crisis.

For more info please visit: [www.hep-ksu.info](http://www.hep-ksu.info) or contact: 014786100 ext. 142

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