

Chronic rhinitis

or: a constantly blocked nose.

Introduction

Most of us are familiar with the unpleasant feeling of a cold, a regular experience winter after winter: a completely blocked nose. We are left to breathe through our dry mouths. Phlegm sticks in our throat. Everything tastes bland, because we have lost our sense of smell. And during the night, we sleep fitfully and begin to snore. As a general rule, it takes a week for the whole unpleasant experience to be over.

However, there are many people for whom a blocked nose becomes a persistent state. Easily purchased decongestant nose drops provide only unsatisfactory and far too brief relief. In the further course of events, there is a detrimental effect on the ability to cope with the demands of everyday life, at work and while playing sports. The quality of life is greatly reduced: at night, the blocked nose prevents healthy refreshing sleep, and the day is dominated by feelings of fatigue and exhaustion. Our sense of smell is affected, depriving us of the seductive scent of a rose or the enjoyment of a glass of full-bodied red wine. If the "blocked nose" warning signal persists for any length of time, you should not wait and hesitate, but seek medical advice. The symptom of a "blocked nose" can also be an early sign of other disorders of the respiratory tract, such as asthma or cardiovascular disorders. Your doctor will be able to identify the cause of your blocked nose. The most common causes are allergies, chronic infections, adenoids, anatomic constrictions in the nose and in rare cases also a tumour. Effective treatment options exist for all of these diseases.

Causes of a blocked nose

Allergic rhinitis

We differentiate between classic "hay fever" (*intermittent or seasonal allergic rhinitis*) and an all-year-round blocked nose (*persistent or perennial allergic rhinitis*). The symptoms of intermittent allergic rhinitis are present for fewer than 4 days a week and continue for less than four weeks. It generally manifests itself

in the classic *hayfever* symptoms, such as a watery nasal discharge, sneezing fits, itching and a blocked nose, often also associated with inflamed eyes and a scratchy throat. Tree pollens are the main triggers of this allergy in springtime and grass pollens in early summer. Leaving allergic rhinitis untreated increases the risk of the subsequent development of allergic asthma. Physicians refer to this as allergic progression.

Persistent allergic rhinitis often remains undetected, because in many cases, its only manifestation is as a permanently blocked nose, without any of the other common allergic symptoms. The main triggers for the persistent form are allergens of dust mites or pets.

Hyperreactive rhinopathy

Even without an allergy, it is possible to suffer from a blocked nose with swollen nasal conchae. This results in the nasal mucous membranes reacting very sensitively to unspecified external irritants. A whispof smoke from a cigarette, cold air or steam from a plate of hot soup may be enough to trigger swelling of the nasal mucous membranes. As an added nuisance, the nose starts running with a watery discharge. During the night, a blocked nose is even more bothersome, as lying down causes the nasal concha to swell more. In addition, the air in the bedroom is often too dry, particularly in winter. Because of the blocked nose, breathing is only possible through the mouth. As the result, we wake up in the morning with a dry mouth and a throat congested with phlegm and irritated.

Chronic rhinosinusitis

Chronic rhinosinusitis is a persistent inflammation of the mucous membranes of the nose and the paranasal sinuses. Quite often, an inflammation of the paranasal sinuses is preceded by a viral infection of the upper respiratory tract, preparing the ground. Damage to the cilia of the nasal mucous membranes makes it possible for bacteria or fungi to settle. The result is a blockage of the central nasal passage, into which all channels from the paranasal sinuses drain. Congestion in this key site results in the paranasal sinuses not being ventilated and the mucous not being drained. Chronic rhinosinusitis then develops on the lining of the blocked-off paranasal sinuses.

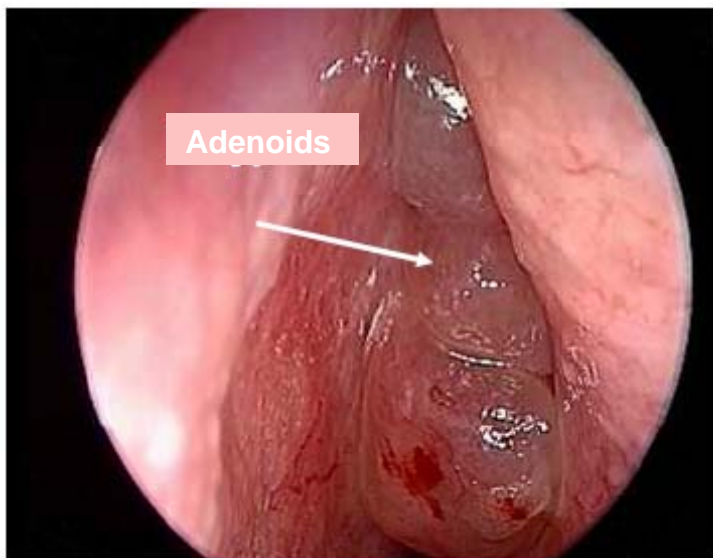
Adenoids

Adenoids are another form of chronic inflammation of the nasal mucous membranes and can be the manifestation of a number of different nasal diseases. The cause of adenoids is unknown, but they are not an allergy.

The *antrochoanal polypus* is a single large adenoid originating in the maxillary sinus, with the ability of completely obstructing one side of the nose.

Unilateral adenoids are always unusual and may point to a tumour (e.g. an inverted papilloma or carcinoma).

Bilateral adenoids are the most common form. The presence of adenoids in conjunction with bronchial asthma and aspirin intolerance is known as a *Widal Triad*.



Mechanical factors

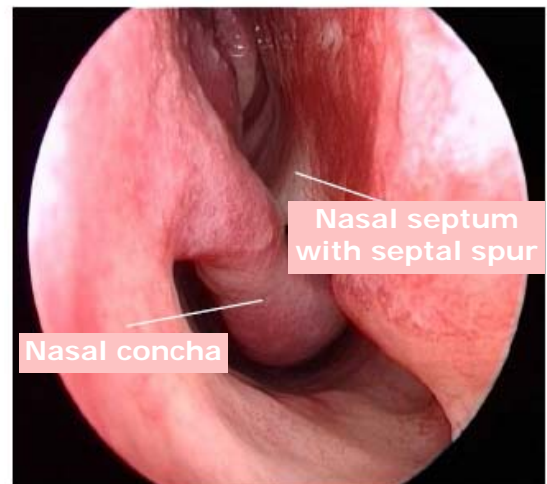
In addition to diseases of the nasal mucous membranes, anatomical constriction can also lead to a blocked nose. Most commonly, this is seen in conjunction with a deformity of the nasal septum or an external distortion of the nose. In rare cases, the obstruction in the nose may be caused by a tumour.

Diagnostics of a blocked nose

The initial interview on the patient's medical history, during which the doctor will ask detailed questions on the patient's symptoms, allows important conclusions regarding the causes of the blocked nose. Nasal endoscopy is central to the examination of the nose. This delicate optical device allows doctors to investigate the interior of the nose gently and in great detail. A nasal endoscopy makes it possible to assess the consistency of the nasal mucous membranes and identify pus draining from the paranasal sinuses, adenoids, tumours or anatomical constrictions. Investigations of a blocked nose are rounded off with allergy tests, a smell test and in some cases with a computer tomography.



Nasal endoscopy



Treatment of a blocked nose

Nasal douches with a mild saline solution, plenty of fresh air and a humidifier in the bedroom during the heating period help to restore nasal mucous membranes to their natural function and defence mechanisms.

There are basically three treatment options for the treatment of allergic rhinitis: allergen avoidance, drugs and immunotherapy.

Avoiding allergens is particularly important in cases of dust mite allergies. Mite-proof bed linen is used. As far as drug treatment is concerned, a blocked nose as well as a runny nose and also the urge to sneeze are very effectively treated with nasal sprays containing cortisone, which can be combined with an antihistamine.

Immunotherapy, i.e. desensitization, is the third pillar in the treatment of the allergy.

A chronic inflammation of the paranasal sinuses is treated with a cortisone nasal spray in combination with antibiotics, while adenoids are treated just with cortisone nasal spray. In the absence of a response to consistent treatment with medication, a computer tomography of the paranasal sinuses is performed. If this confirms the diagnosis of chronic rhinosinusitis, the recommendation is for functional endoscopic surgery of the paranasal sinuses. This operation involves the widening of the natural openings of the paranasal sinuses and the restoration of normal ventilation and drainage, while protecting the nasal mucous membranes.

The only successful treatment for anatomic constrictions such as a deformity of the nasal septum or a deflected nose is surgery.

The aim of treating a blocked nose with a combination of medication and surgery is to enable patients to breathe freely again and enjoy a full sense of smell, and to restore the natural ventilation of the paranasal sinuses.

Author:

Dr. med. Christoph Schlegel-Wagner

Chairman of the "Active-Nose" Panel of Experts (www.active-nose.ch)

Assistant Medical Director Department of Ear Nose and Throat (www.ksl.ch)

Luzerner Kantonsspital

6000 Luzern 16