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Persistent rhinitis (Sneezing)

Persistent rhinitis typically causes sneezing and a blocked, itchy and runny nose. An allergy is a common cause but there are also non-allergic causes. Treatment options include avoiding things that cause an allergy, an antihistamine nasal spray, antihistamine tablets and a steroid nasal spray. Other treatments are sometimes used.

What is rhinitis?

Rhinitis means inflammation of your nose. Common symptoms include sneezing, a blocked or stuffy nose, a runny nose (watery discharge) and an itchy nose.

Less common symptoms include itchy throat, loss of smell, face pain, headache and itchy and watery, red eyes.

The most common cause of rhinitis is a cold. Hay fever is another common cause. Rhinitis usually affects both nostrils at the same time.

What is persistent rhinitis?

This means rhinitis symptoms that last for a long time. There are a few different ways of defining this, but, generally speaking, persistent rhinitis is when rhinitis symptoms are present for most of the time, and for longer than a month.

The symptoms vary in severity. Some people have mild nasal irritation which comes and goes and causes little trouble. On the other hand, some people become distressed by their regular, daily symptoms. Severe symptoms can affect work, school, home and social life.

What causes persistent rhinitis?

The causes of persistent rhinitis can be divided into allergic and non-allergic. An allergic cause for persistent rhinitis is the most common.

Persistent allergic rhinitis

The most common cause of persistent rhinitis is an allergy to the house dust mite. However, allergy to pets or other animals is also common. **Note**: the thing that causes an allergy (house dust mite, dead animal skin, etc) is often known as the allergen.

- The house dust mite is a tiny creature that is present in every home. It mainly lives in bedrooms, mattresses, pillows and carpets as part of the dust. It usually causes no harm but some people are allergic to the tiny droppings (faeces) of the mite. House dust mites are present all year round but there is often a peak in their numbers in spring and autumn.
- Pets - flakes of dead animal skin as well as urine and saliva from pets, such as a cat, dog, horse, hamster, guinea pig, etc, are the cause of the allergy in some cases.
- Other allergies are less common. An allergy to something at work sometimes occurs. For example, having an allergy to laboratory animals, or to latex, to flour or wood dust, or to other chemicals. This may be suspected if symptoms ease at weekends or on holidays.

Hay fever (caused by an allergy to pollen) is another type of allergic rhinitis. However, hay fever tends to be seasonal and not persistent because it occurs during a particular period each year. For example, it occurs during the grass pollen season of late spring and early summer.

Symptoms of allergy in your nose are due to your immune system reacting to the allergen (such as pollen or house dust mite droppings). Cells in the lining of your nose release histamine and other chemicals when they come into contact with the allergen. This causes inflammation in your nose (rhinitis) and the typical symptoms developing.

Persistent non-allergic rhinitis

There can be various other causes or triggers for persistent rhinitis. These triggers can cause a rhinitis in their own right but they can also make symptoms worse if you already have an allergic rhinitis. They include the following:

- **Irritation of your nose** by smoke, strong smells, fumes, chemicals, changes in temperature or humidity.
- **Hormonal changes during pregnancy.** Rhinitis is very common during pregnancy, and is probably due to high levels of the hormones oestrogen and progesterone. Rhinitis due to pregnancy goes away after giving birth.
- If you have an overactive thyroid gland, this can also sometimes lead to rhinitis.
- **Food and drink** - mainly hot, spicy food, or alcohol. Sensitivity to certain food colourings or preservatives may be a cause.
- **Emotion** such as stress or sexual arousal can sometimes affect your nose.
- **Medication** - a side-effect from certain medicines is a rare cause. These include beta-blocker medicines, aspirin and other anti-inflammatory medicines, angiotensin-converting enzyme (ACE) inhibitors, the contraceptive pill and chlorpromazine.
- **Rhinitis medicamentosa** is the name given to rhinitis that can occur due to the overuse of nasal decongestant sprays. These sprays are used to help a blocked nose and they reduce swelling of blood vessels in your nose. However, if they are used for more than seven days, the swelling can come back. The temptation is to use yet more decongestant and a vicious circle can be set up.
- **Cocaine use** - when it enters the nose, cocaine affects the lining of the nose, causing changes in blood flow and inflammation. Regular cocaine use can lead to rhinitis. It can also cause much more severe damage to the inside of the nose.
- Some types of **vasculitis** (conditions causing inflammation of blood vessels) can cause rhinitis symptoms, particularly granulomatosis with polyangiitis. These conditions are rare, and cause other problems in the body, aside from rhinitis.

In some people, no specific trigger for their persistent rhinitis may be found. This is called idiopathic rhinitis. Idiopathic means that there is no certain cause that has been found.

How common is persistent rhinitis?

Persistent rhinitis is common. It can affect anyone of any age, although it affects adults more commonly than children. It is becoming increasingly common in older people.

Allergic rhinitis (be it hay fever or persistent rhinitis) tends to run in families. You are also more likely to develop allergic rhinitis if you already have asthma or eczema.

Equally, if you have allergic rhinitis, you are more likely to develop eczema or asthma. The conditions asthma, eczema and allergic rhinitis are known together as atopic conditions, or atopy. A tendency to atopy can run in families.

Are any tests needed to diagnose persistent rhinitis?

Usually not. Most cases are due to allergy and the symptoms are usually typical. Your doctor can usually diagnose allergic persistent rhinitis by talking to you about your symptoms and your medical history. They may also examine your nose.

Sometimes, if the cause of persistent rhinitis is unclear, or when the diagnosis is in doubt, your healthcare professional may suggest blood tests or skin prick allergy testing. These tests help to look for the exact cause of your symptoms.

The blood tests involve measuring specific antibodies to different allergens. These are called immunoglobin E (IgE) and may help to identify any particular antigen.

Other tests, such as a detailed examination of your nose, are sometimes needed to look for other possible causes of your symptoms. They may also be needed if complications are suspected (for example, to check for a polyp in the nose). These can include X-rays and scans.

How to treat persistent rhinitis

The following treatment options are for allergic rhinitis - the most common cause of persistent rhinitis. Non-allergic rhinitis can be more difficult to treat and depends on the cause. Steroid and antihistamine nasal sprays are usually recommended for non-allergic rhinitis.

The commonly used treatment options for allergic rhinitis are avoiding the cause of the allergy, antihistamine nasal sprays, antihistamine tablets and steroid nasal sprays. These can be used in combination.

Note: if your rhinitis symptoms are not controlled on the medication that you are taking after 4-6 weeks, you should discuss this with your doctor. You may need to try a different treatment or add in another treatment.

Avoiding the cause of the allergy

If you have persistent rhinitis caused by an allergy, by avoiding the cause of an allergy, symptoms should reduce and stop. However, this is not as easy as it sounds.

- If you are allergic to house dust mite, you may find that symptoms are less severe if you reduce the number of mites in your home. This is hard work and involves using bedding covers and regular cleaning and vacuuming with particular attention to your bedroom and bedclothes.
- If a pet is the cause then for some people it is easy to give up the pet. However, for others it would be a great sadness to lose a pet. It may help if you keep pets out of the main living areas and in particular, out of your bedroom. Washing pets regularly can also help.

See the separate leaflet called House dust mite and pet allergy for more details on how to reduce house dust mite.

However, treatment with a nasal spray or tablets (see below) often works so well that you may not have much motivation or need to avoid the cause of the allergy. Saying that, it is thought that if you have a pet or animal allergy and you do avoid any further contact, you may reduce your risk of developing asthma.

Antihistamine nasal sprays

A dose from an antihistamine nasal spray such as azelastine can rapidly ease itching, sneezing and watering (within 15 minutes or so). It may not be so good at easing congestion.

Antihistamines work by blocking the action of histamine. This is one of the chemicals involved in allergy reactions. A spray can be used as required if you have mild symptoms. It can also be taken regularly to keep symptoms away.

Antihistamine tablets (or liquid medicines)

Antihistamines taken by mouth (tablets or liquids) are an alternative. They ease most of the symptoms but may not be so good at relieving a blocked nose (nasal congestion).

Antihistamines taken by mouth are good if you have eye symptoms as well as nose symptoms. They are also usually given to small children instead of a nasal spray. A dose usually works within an hour. Therefore, one can be taken as required if symptoms are mild, or come and go. One can also be taken regularly if symptoms occur each day.

There are several types of antihistamines that you can buy at pharmacies or obtain on prescription. Examples include cetirizine, loratadine, fexofenadine, rupatadine, acrivastine, and bilastine.

Older types such as chlorphenamine are also available, but cause drowsiness. They are not used very often because of this, but are occasionally useful for people who have distressing symptoms at night, when drowsiness might be useful. Do not drive or operate heavy machinery if you have taken a drowsiness-causing antihistamine.

If you are pregnant or breast-feeding, it is advised to try to avoid antihistamines if possible. Treatment with a steroid nasal spray is usually tried first (see below). An antihistamine may sometimes be used if your symptoms are not controlled; cetirizine and loratadine are the two antihistamines that have the most evidence for safety in pregnancy, and are the preferred choices. Discuss with your doctor or pharmacist if you are pregnant or breast-feeding and have rhinitis.

Steroid nasal sprays

A steroid nasal spray such as beclometasone usually works well to clear all the nasal symptoms (itch, sneezing, watering and congestion). It works by reducing inflammation in the nose. A steroid nasal spray also tends to ease eye symptoms. It is not clear how it helps the eye symptoms - but it often does! Steroid nasal drops are also sometimes used.

It takes several days for a steroid spray to build up to its full effect. Therefore, you will not have an immediate relief of symptoms when you first start it. In some people it can take up to three weeks or longer to be fully effective. So do persevere. A steroid nasal spray tends to be the most effective treatment when symptoms are more severe. It can also be used in addition to antihistamines if symptoms are not fully controlled by either alone.

You need to use the spray each day to keep symptoms away. However, once symptoms have gone, the dose of a steroid spray can often be reduced to a low maintenance dose each day to keep symptoms away. There are several types that you can buy at pharmacies, or get on prescription. Side-effects or problems with steroid nasal sprays are rare (read the packet leaflet for details).

Other treatment options

Nasal douching

Nasal douching means flushing out the nose and sinuses with a salt water solution (saline). Using a nasal douche regularly can help to wash away excess mucus in the nose, along with any allergens or irritants. This can be particularly useful when used before a nasal spray, to clear out the nose and allow the spray to get where it needs to go.

Nasal rinse solutions can be bought pre-prepared in bottles or sachets. Examples include Neilmed® and Sterimar®.

They can also be prepared at home, by mixing 500mL of freshly boiled water with 1 teaspoon of salt and 1 teaspoon of sodium bicarbonate, allowing the solution to cool, and then either sniffing the solution from the cupped palm of your hand, or administering it using a squeezy bottle.

Other nasal sprays

The following are sometimes used. They tend to be used if there are problems with any of the above treatments. Sometimes one is used as an add-on treatment in addition to one or more of the above treatments if symptoms are not fully controlled:

- Sodium cromoglicate nasal spray. Like steroid sprays, it takes a while to build up its effect and needs to be taken regularly. It is thought to work by stopping the release of histamine from certain cells. One disadvantage is that it needs to be taken 4-5 times a day (steroid sprays are taken 1-2 times a day).
- Ipratropium bromide nasal spray may be worth a try if you have a lot of watery discharge. It has no effect on sneezing or congestion.
- Decongestant nasal sprays that you can buy at pharmacies are not usually advised for more than a few days. They have an immediate effect to clear a blocked nose. However, if you use one for more than seven days, a rebound, more severe congestion of the nose often develops. Therefore, don't use decongestant nasal sprays for more than seven days. You should also not use a decongestant nasal spray if you are taking an antidepressant called a monoamine-oxidase inhibitor (MAOI).

Eye drops

If you have eye symptoms, if needed, you can use eye drops in addition to other treatments:

- **Antihistamine eye drops** work quickly, so you can use them as required to ease a flare-up of eye symptoms. You can also use them regularly if needed. There are several types - eg, emedastine and azelastine.
- **Mast cell stabilisers** are another type of eye drop. There are different types - eg, ketotifen and nedocromil. They are thought to work by stopping the release of histamine from certain cells (mast cells). You need to use them regularly to prevent symptoms.

Treatment for severe symptoms

Rarely, a short course of steroid tablets is prescribed. For example, for students sitting exams, who have severe symptoms which are not eased by other treatments. Steroid tablets have short-term risks, such as potentially causing insomnia (difficulty sleeping) and mood changes, which is why they are reserved for extreme cases not responding to other treatments. Steroid tablets should not be used for long periods to treat rhinitis, as serious side-effects may develop. See the separate leaflet called Oral steroids for more details.

Immunotherapy (desensitisation)

This treatment is sometimes used, mainly in cases where symptoms are severe and not helped by other treatments. It is done using a series of injections of the allergen causing the rhinitis, in increasing quantities.

The idea is that your immune system will become desensitised to the allergen. This means that the allergic response that your body mounts when it is exposed to the allergen in the future is reduced, so improving your symptoms.

Another technique is being developed which involves placing the allergen under the tongue. However, this may not yet be widely available.

Surgery

Surgery is not often used to treat allergic persistent rhinitis but if you develop complications such as nasal polyps (see below) it is sometimes needed.

How long is treatment needed for?

Persistent rhinitis is an ongoing (chronic) condition that usually needs regular treatment to prevent symptoms. However, over time the condition may ease and even go completely in some cases. It may be worth stopping treatment every six months or so to see if symptoms come back without the treatment. The treatment can be started again if symptoms return.

Of course, if you have persistent rhinitis caused by an allergy, if you remove the source of the allergy, your symptoms should reduce and stop. You may no longer need treatment.

Are there any complications of persistent rhinitis?

Sinusitis

Sinusitis is the most common complication of persistent rhinitis. The sinuses are small, air-filled spaces inside the cheekbones and forehead. They make some mucus which drains into the nose through small channels.

Allergens can irritate the lining of your sinuses in the same way that they irritate the lining of your nose.

If you have a blocked or congested nose or lots of nasal discharge, it can stop your sinuses from draining properly into your nose. This means that the mucus in the sinuses becomes blocked and can be more easily infected.

See the separate leaflets called Acute sinusitis and Chronic sinusitis for more details.

Nasal polyps

Nasal polyps are sometimes a complication of rhinitis. Nasal polyps are swellings (noncancerous growths) that can grow from the lining of your nose. When it is fully grown it looks rather like a grape. One polyp can form or there may be a number of polyps together. Sometimes polyps can form in the sinuses as well. They are usually flesh-coloured, pale grey or pink.

If a polyp is big or if there are large numbers of polyps, a number of problems can develop. Your sense of smell may be affected or your nose may feel blocked, causing difficulty breathing.

Sometimes polyps can block the drainage of your sinuses and lead to sinusitis as described above. Large polyps may need to be surgically removed but smaller polyps can often be treated with steroid nasal drops (see above) which help to shrink them. See the separate leaflet called Nasal polyps for more details.

Further reading

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