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Hay Fever and Seasonal Allergies

Hay fever is caused by an allergy to pollen. Common hay fever symptoms are a runny, itchy and/or blocked nose, sneezing and itchy eyes. Common treatments are an antihistamine nasal spray or medicine and/or a steroid nasal spray. Other treatments are sometimes used if these common treatments do not work so well.

What is hay fever?

Pollen is the name given to the fine powder that is produced by plants, trees or flowers to fertilise other plants, trees or flowers of the same species. Strictly speaking, hay fever is caused by an allergy to grass or hay pollens. Grass pollen is the most common cause and tends to affect people every year in the grass pollen season from about May to July (late spring to early summer). However, the term is often used when allergies are caused by other pollens such as tree pollens. Tree pollens tend to affect people from March to May (early to late spring) each year. Other people may be allergic to weed pollens (including nettles and docks). Weeds tend to pollinate from early spring to early autumn.

Symptoms are due to your immune system reacting to the pollen. Cells on the lining of the nose and eyes release chemicals (for example, histamine) when they come into contact with pollen. This causes inflammation in the nose (rhinitis) and eyes (conjunctivitis). Sometimes the sinuses and throat can also be affected.

Hay fever is also called seasonal allergic rhinitis because symptoms tend to occur at the same time, or in the same season, each year.

Who gets hay fever?

Hay fever is very common. It affects about 2 in 10 people in the UK. It often first develops in children of school age and during the teenage years. Symptoms return for a season each year. But, the condition eventually goes away or improves in many cases (often after having had symptoms each season for several years).

Hay fever tends to run in families. You are also more likely to develop hay fever if you already have asthma or eczema. Equally, if you have hay fever, you are more likely to develop eczema or asthma. The conditions asthma, eczema and hay fever are known together as atopic conditions, or atopy. A tendency to atopy can run in families.

What are the symptoms of hay fever?

The symptoms of hay fever can vary from person to person. Some people only have mild symptoms that tend to come and go. Others can be severely affected with symptoms that are present every day during the pollen season:

- Common symptoms one or two or all of these symptoms may occur. They include:
 - · A runny nose or a blocked nose.
 - · An itchy nose.
 - · Sneezing.
 - Itchy and watery red eyes.
 - An itchy throat.
- Less common symptoms these include:
 - · Loss of smell.
 - · Face pain.
 - Sweats.
 - · Headache.
- **Asthma symptoms** such as wheeze and breathlessness, which may get worse if you already have asthma. Some people have asthma symptoms only during the hay fever season. If you have hay fever, you are more likely to develop asthma.

The symptoms may be so bad in some people that they can affect sleep. They may interfere with school and examinations, or interfere with work.

Hay fever and other seasonal allergies may also be associated with oral allergy syndrome.

How is hay fever diagnosed?

Hay fever can usually be diagnosed if you have any of the typical symptoms that occur during the hay fever season. You don't always need to see a doctor if you think you have hay fever. It is more common if you have a history of asthma or eczema. Your pharmacist may be able to suggest treatments that will help improve your symptoms.

If there is any doubt about the diagnosis, you should see your doctor, who may suggest blood tests or skin prick testing to confirm your pollen allergy. See the separate leaflet called Skin Prick Allergy Test for more details.

Very occasionally, other tests may be needed. Scans or tests to check the airflow through your nostrils may be rarely used to rule out other causes of the symptoms.

Will it help if I avoid pollen?

It is impossible to avoid pollen totally. However, symptoms tend to be less severe if you reduce your exposure to pollen. The pollen count is the number of pollen grains per cubic metre of air. The pollen count is often given with TV, radio, internet, or newspaper weather forecasts. A high pollen count is a count above 50.

You can check the current pollen forecast here. The following may help when the pollen count is high:

- Stay indoors as much as possible and keep windows and doors shut.
- Avoid cutting grass, large grassy places and camping.
- Shower and wash your hair after being outdoors, especially after going to the countryside.
- Wear wraparound sunglasses when you are out.
- Keep car windows closed and consider buying a pollen filter for the air vents in your car. These should be changed at every service.

What are the commonly used treatments?

The commonly used hay fever treatment options are:

- Antihistamine tablets.
- Steroid nasal sprays.
- · Antihistamine nasal sprays.
- · Eye drops.

If your hay fever symptoms are not controlled on the medication that you are taking after 2-4 weeks, you should discuss this with your doctor. You may need to try a different treatment or add in another treatment.

If you are taking hay fever medication regularly and your hay fever is well controlled on your current treatment, you should continue this treatment until the end of the pollen season.

Antihistamine nasal spray

A dose from an antihistamine nasal spray 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 allergic 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 nasal 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 come and go. One can also be taken regularly if symptoms occur each day.

There are several types and brands of antihistamines that you can buy at pharmacies or get on prescription. Older antihistamines, such as chlorphenamine, work well but make some people drowsy. So, they should not be taken if you are driving or operating machinery. There are several newer ones that cause less drowsiness. Ask your pharmacist or doctor for advice. Commonly used ones include:

- Loratadine
- Cetirizine
- Fexofenadine (prescription only)
- Acrivastine

If you are pregnant or breast-feeding, you are usually 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. Discuss with your doctor or pharmacist if you are pregnant or breastfeeding and have hay fever.

Antihistamine medicines such as loratadine and cetirizine may be used by children from the age of 2 years.

Steroid nasal sprays and drops

A steroid nasal spray 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 its full effect. Therefore, there is no 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. (It is best to start taking it a few weeks before the hay fever season is likely to begin if you know that you have hay fever.)

A steroid nasal spray tends to be the most effective treatment when symptoms are more severe. It can also be used by adults in addition to antihistamines if symptoms are not fully controlled by either alone.

You need to use the spray each day over the hay fever season 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 brands which you can buy at pharmacies, or obtain on prescription. Side-effects or problems with steroid nasal sprays are rare (read the packet leaflet for details).

Commonly used steroid nasal sprays and drops include:

- Mometasone
- Fluticasone
- Betamethasone
- Beclometasone
- Budesonide
- Triamcinolone

Other hay fever remedies/treatment options

Eye drops

If necessary, you can use eye drops in addition to other treatments:

- Mast cell stabiliser eye drops. These drops are thought to work by stopping the release of histamine from certain cells called mast cells. You need to use them regularly to prevent symptoms. They can be used throughout the hay fever season if you need to. There are several different ones. Commonly used ones include sodium cromoglicate, nedocromil and lodoxamide.
- 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. It is best not to use them for more than six weeks at a time, however. There are several different ones, including antazoline, azelastine and epinastine.
- Anti-inflammatory eye drops, such as diclofenac, are also sometimes used for hay fever.

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). This appears to be the safest medicine to use for hay fever in the first three months of pregnancy.
- 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 5-7 days, a rebound, more severe congestion of the nose often develops. One may be useful for a few days to clear a blocked nose when you first use a steroid nasal spray. The steroid can then get to the lining of the nose to work. Don't use decongestant nasal sprays for more than seven days.

Leukotriene receptor antagonists

These medicines block the effect of chemicals called leukotrienes which trigger hay fever symptoms. They work well when taken with antihistamine tablets, especially in people who also have asthma. These are mostly prescribed by specialists. One example is montelukast.

Nasal saline washouts

This is done by some people. The aim is to wash pollen out of the nostrils. This can sometimes help to reduce the need for steroid nasal sprays. Washouts can be bought from a pharmacist and are comprised of a delivery system such as a squeezable plastic bottle containing salt water (saline) connected to a tube inserted into the nose. More sophisticated devices with pumps to control the pressure of the liquid are also available. For most benefit, washouts should be on a daily basis.

Treatment for severe symptoms

Rarely, a short course of steroid tablets is prescribed for a week or so. For example, students sitting examinations, who have severe symptoms which are not eased by other treatments, may benefit from a short course of steroids. Steroid tablets usually work well to reduce inflammation. A short course is usually safe. However, you should not take steroid tablets for long periods to treat hay fever, as serious side-effects may develop.

Immunotherapy (desensitisation)

This treatment is sometimes used, mainly in cases where symptoms are severe and not helped by other treatments. There are two methods:

- Subcutaneous immunotherapy (SCIT). This is done using a series of injections of the allergen (in this case pollen) into the
 tissue just under the skin (the subcutaneous tissue). The idea is that your immune system will become desensitised to the
 pollen. This means that the allergic response that your body mounts when it is exposed to the pollen in the future is reduced,
 so improving your symptoms.
- Sublingual immunotherapy (SLIT). This is similar to the above but the allergen (pollen) is placed under the tongue (that is, sublingually). Typically, the dose is one tablet a day, starting four months before the start of the pollen season and continued for up to three years.

Immunotherapy is normally supervised by a specialist after careful assessment. It is not suitable for everyone. For example, people with certain diseases, pregnant women and people taking certain medicines will not be able to have this treatment. Your doctor will advise if this treatment is suitable for you.

Note: immunotherapy is unlikely to cure hay fever totally but will often greatly reduce the severity of symptoms. The less severe symptoms will then tend to be much easier to control with standard treatments such as antihistamines and nasal sprays. Also, immunotherapy has been shown to give long-lasting benefit for some years after stopping treatment.

Asthma and hay fever

If you develop asthma symptoms during the hay fever season you may be prescribed an inhaler. If you already have asthma, your asthma may become worse in the hay fever season. You may need an increase in the dose of your usual inhalers (or other treatment that you take for asthma) during the hay fever season.

Further reading & references

- Immunotherapy for allergic rhinitis; British Society for Allergy and Clinical Immunology (2011)
- Solelhac G, Charpin D; Management of allergic rhinitis. F1000Prime Rep. 2014 Oct 1;6:94. doi: 10.12703/P6-94. eCollection 2014.
- Primary Care Rhinitis algorithm; British Society for Allergy and Clinical Immunology (BSACI)
- Lipworth B, Newton J, Ram B, et al; An algorithm recommendation for the pharmacological management of allergic rhinitis in the UK: a consensus statement from an expert panel. NPJ Prim Care Respir Med. 2017 Dec;27(1):3. doi: 10.1038/s41533-016-0001-y. Epub 2017 Jan 23.
- Brozek JL, Bousquet J, Agache I, et al; Allergic Rhinitis and its Impact on Asthma (ARIA) guidelines-2016 revision. J Allergy Clin Immunol. 2017 Oct;140(4):950-958. doi: 10.1016/j.jaci.2017.03.050. Epub 2017 Jun 8.
- Allergic Rhinitis; NICE CKS, October 2015 (UK access only)

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