

Allergic Rhinitis: A common problem, not to be sneezed at! (Update May 2025)

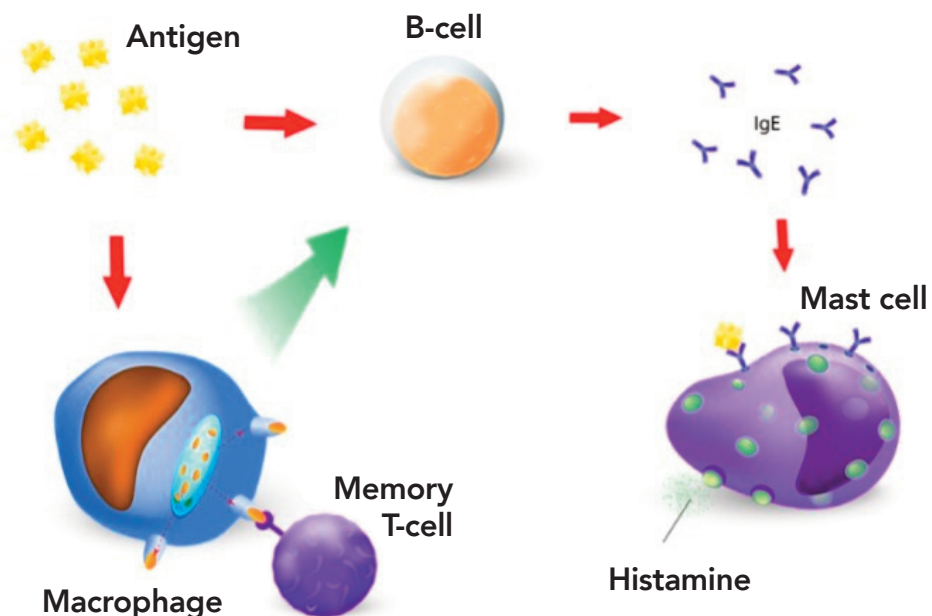


Fiona Mosgrove, PCRS Education Lead and **Dhiren Dayal**, PCRS Policy Forum and Education Committee member

There are various forms of rhinitis, which is defined as inflammation of the nasal mucosa and can be due to various causes such as an allergen, infection, vaso-motor abnormality (caused by an irritant). The condition may also involve the sinuses and is known as rhino-sinusitis.

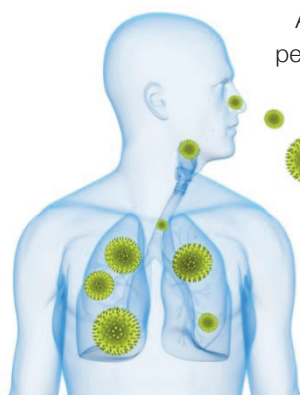


THE MECHANISM OF ALLERGY



Allergic rhinitis is caused by inhalation of allergens such as pollen, dust, or animal dander that trigger an abnormal IgE reaction in the nose of susceptible people, especially those with asthma or a family history of atopy. It is more common in children and younger adults. The pathophysiology of allergic rhinitis is very similar to that seen in asthma or eczema. Release of mediators from cells causes the inflammation and symptoms experienced by the individual.

Allergic rhinitis is a common problem in the UK, affecting approximately 20% of the population, with 80% of asthmatics having nasal symptoms as well as asthma.² Patients may also have symptoms of allergic conjunctivitis and/or eczema. Despite being the root cause of a high level of morbidity and health care costs³ allergic rhinitis is often seen by patients and health care professionals as trivial, which it is not.



Allergic rhinitis may be seasonal, perennial or both. The classical seasonal rhinitis, known as hay fever, is widely recognised, occurring in the summer months, triggered by grass and tree pollens, and causing streaming eyes (allergic conjunctivitis) sneezing, itchy nose/palate and runny or blocked and snuffy nose. However, seasonal rhinitis may occur in

any season e.g. Autumn, when it may be due to spores from moulds. Symptoms may start as early as January and February when the trees start to produce their pollen. The Asthma and Lung UK pollen calendar opposite illustrates the year-round pollen triggers; others triggers include house dust mite (HDM), animal dander, hobbies or occupational allergens.

Diagnosis of allergic rhinitis

The diagnosis of allergic rhinitis starts with simply asking questions about any nasal symptoms. An ideal opportunity to do this with patients with asthma is during an asthma review. Asthma templates should include read codes relating to rhinitis to prompt the clinician to ask about any symptoms.

Symptoms of allergic rhinitis could be any or all of the following:

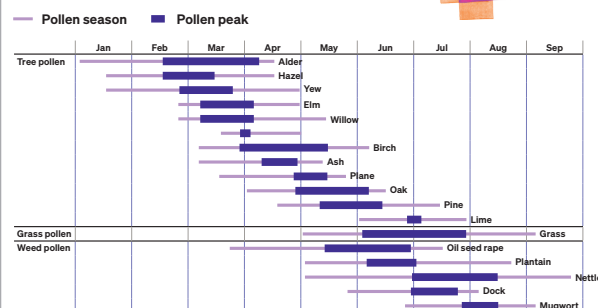
- Sneezing
- Nasal discharge which is usually clear and runny or
- Nasal blockage/stuffy, usually bilateral
- Post nasal drip
- Itchy Palate
- General debility (headaches, tiredness)

Symptoms are bilateral, further investigation and possible referral may be needed if symptoms are persistently unilateral, as this could be a sign of blockage caused by polyps or more seriously, a carcinoma.

The ARIA Guidelines classify allergic rhinitis as intermittent or persistent, and mild, moderate or severe, depending on symptoms and their frequency.¹ Although the mechanism it is not quite clear, poorly treated rhinitis is linked with sub optimal control of asthma.^{1,2} It is thought this may be due to mediator release triggering both rhinitis and asthma or direct trickling of inflammatory products into the lower respiratory system.

Allergic rhinitis may be triggered by a person's occupation

Pollen calendar



- 1 Take your preventer medicine every day, as prescribed
- 2 Take hay fever medicines
- 3 Keep your reliever inhaler with you

Adapted from the Asthma and Lung UK pollen calendar

<https://www.asthmaandlung.org.uk/pollen-calendar>

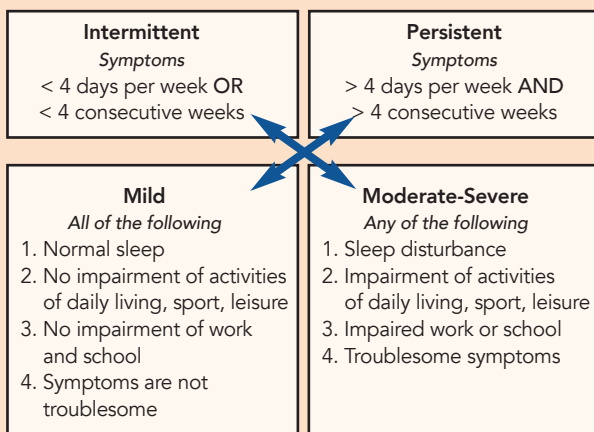
For free pollen forecast visit

<https://www.metoffice.gov.uk/weather/warnings-and-advice/seasonal-advice/pollen-forecast>

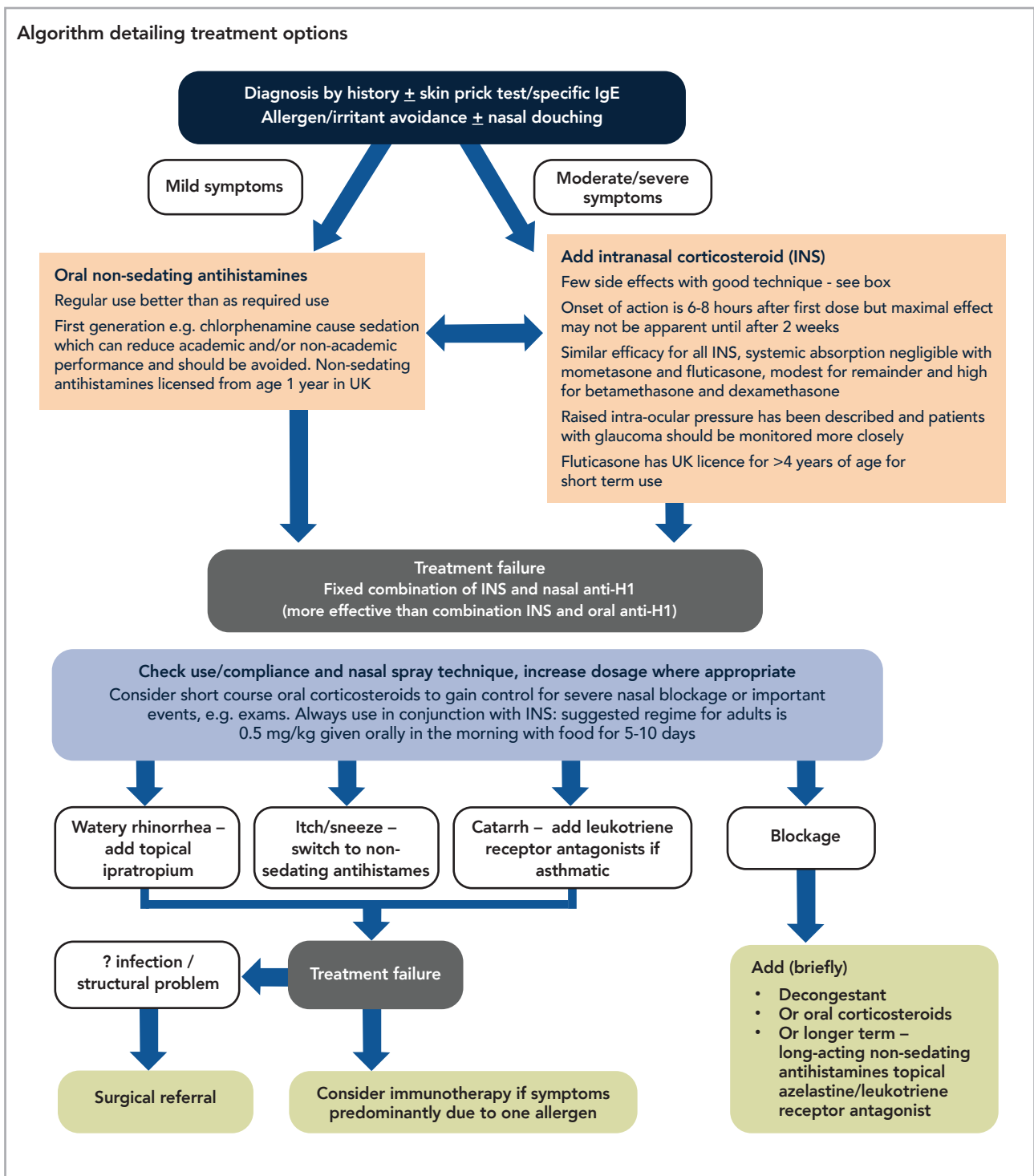
and therefore questions about occupational history and when symptoms occur are important.⁴ The rhinitis may precede asthma by several years; so, removal from exposure to the allergen is essential to stop this “allergic march”.

Allergic rhinitis is mainly diagnosed on clinical history, supported by nasal examination and in some cases, allergy testing (although availability of this in primary care is variable). Allergy testing (via skin prick test or serum specific IgE) is useful if the allergen causing the symptoms can be avoided e.g. animal dander, mould etc. This is more difficult if the allergen identified is a pollen, although exposure can be minimised. Various websites e.g. Met Office⁵ and mobile phone applica-

ARIA Classification of Allergic Rhinitis



This diagram has been based on Bousquet, Jean et al (2001, 2008) and Brozet, Jan L et al (2017) on Allergic rhinitis and its impact on asthma'. For more information go to: <https://www.otoscape.com/eponyms/aria-classification-of-allergic-rhinitis.html>.



tions may be accessed to provide awareness of pollen counts, enabling the sufferer to reduce exposure by staying indoors, closing windows or wearing sunglasses if venturing outside. Drying laundry in a tumble dryer to prevent bringing pollen indoors may be useful or hanging clothes indoors if there is no outside space. Avoidance of the allergen, if known and possible, should be encouraged.

Management of allergic rhinitis

Management will depend on the severity of symptoms. See algorithm above for detailed treatment options.⁶

A once daily, non-sedating, antihistamine may be all that is needed to control mild or infrequent symptoms. For more severe nasal symptoms, nasal corticosteroid sprays should be introduced. Allergic rhinitis has been likened to “asthma in the

TOP

TIPS

Rhinitis

- 1 Allergic rhinitis lasts longer than a cold** – but colds trigger more asthma attacks. The main difference between a cold and rhinitis is how long the patient has been having symptoms. Cold symptoms that continue longer than a week, regardless of the time of year, are usually due to something other than a virus. If the patient does in fact have a cold and not rhinitis remind them to be vigilant about their asthma. The cold virus is the most common trigger for asthma and this can be especially difficult for children as they catch colds more frequently than adults.
- 2 Think Christmas** – Think Rhinitis. Alder, birch and hazel can come into pollen as early as January. If you have patients who have seasonal rhinitis caused by these trees then they need to start their nasal spray or drops and antihistamine tablets two weeks before their rhinitis symptoms begin. Asthma reviews for these patients should ideally be in December so their medications are up to date and ready for them to start taking in the New Year. Grass pollen affects some people mainly May – July so for this group of people preventive treatments need to start in April. As well as seasonal rhinitis there is also perennial allergic rhinitis and these commonly relate to indoor allergens such as dust mites, pets, mould and smoking.
- 3 Nasal spray technique is paramount.** Using the nasal spray correctly is the key to avoiding rhinitis flare ups. Key points are: point the spray slightly outwards and don't sniff! People often stop using their nasal spray because "it's not working" but in fact they are not using it properly. An excellent video is available at <http://www.itchysneezy-wheezy.co.uk/RhinitisVideos.html>.
- 4 Prevention is better than cure for rhinitis.** Patients need to keep using their nasal spray even when they don't have symptoms. They might be using their nasal spray for months with no symptoms – tell them this is OK.
- 5 Decongestants can help occasionally but should only be taken for a short period of time.** If the patient has a 'special day' eg exam or wedding nasal sprays that contain decongestant may be useful but should not be used regularly because after a few days they can actually make symptoms worse, often known as rebound congestion. In addition to medicated treatment, proprietary non-drug solutions that douche or wash-out mucus from blocked noses and sinuses give temporary relief.

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nose" therefore, it is not surprising that a nasal corticosteroid spray should be used to treat the condition. It must be stressed that, as with inhaled corticosteroids for asthma, use of the nasal spray should be regularly, usually daily, and not just when symptoms are troublesome. Nasal spray technique is also very important and often incorrectly done by patients. A combination of nasal steroid with an antihistamine can be prescribed for more severe cases where prior treatment has failed. Many patients prefer to buy these products at a pharmacy ('over the counter') as a prescription is not always required and it may be cheaper. In some areas patients have to purchase nasal sprays as they are no longer available on the formulary. It is worth remembering to ask patients if they have already tried any 'OTC' products.

Nasal douching has become more popular recently. Douching removes the triggers from the nasal passages together with the inflammatory products. Leave 15-minute gaps between douching and applying steroid nasal spray.

Short term use (< 7 days) of a nasal or oral decongestant may be advised during particularly severe episodes, especially if nasal blockage is a problem.

Leukotriene receptor antagonists (LTRAs) are another treatment which is particular helpful to treat persistent symptoms in patients with asthma as they treat both conditions.

It is also worth considering the total steroid daily dose if a patient is already on an ICS for asthma and possibly steroid creams for eczema. Systemic absorption between ICS and nasal steroids varies and should be considered when recommending treatments.

Unfortunately, the peak hay fever season often coincides with examination time for teenagers. It has been found that untreated/poorly managed allergic rhinitis can affect exam results.^{7,8} It is good practice to start treatment at least 2 weeks ahead of the expected onset of the hay fever season so that treatment is well established when the pollen count begins to rise. This preventative action could be included in a Personal Asthma Action Plan (PAAP). Routine reviews could be planned so that recall occurs just before the expected onset of hay fever.

If all treatments have been explored and found not to fully control rhinitis symptoms, despite checking adherence and technique, it may be advisable to prescribe in addition a short course of oral steroids to cover a particularly important event (e.g. exam time).

In very severe cases, referral and allergen immunotherapy may be needed, although this tends to be only suitable for patients with/without asthma and having a single trigger causing their rhinitis symptoms.

Allergic rhinitis can usually be very effectively managed in primary care, however, it is essential that patients and clinicians alike are aware of its significance and impact on the lives of sufferers.

Further Information

- ARIA (Allergic Rhinitis Impact in Asthma) guidelines <https://www.sciencedirect.com/science/article/abs/pii/S009167491931187X>
- Allergy UK <https://www.allergyuk.org/types-of-allergies/hayfever/>
- British Society for Allergy and Clinical Immunology (BSACI) Primary Care Guidelines <https://www.bsaci.org/guidelines/primary-care-guidelines/>

This article has been adapted and updated from a previously published article written by Stephanie Wolfe, Norfolk (see page 56) and subsequently updated in 2022 by Carol Stonham and now by Fiona Mosgrove and Dhiren Dayal.

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Professional Development – Further Study and Reflection

Visit the Asthma & Lung UK website at <https://www.asthma.org.uk/advice/triggers/pollen/> for further information on allergic rhinitis including access to a pollen calendar

The British Society for Allergy and Clinical Immunology provide information on events and workshops taking place on allergy related issues <https://www.bsaci.org/education-and-events/workshops-and-short-courses/>



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