Does sneezing lead to wheezing?
What allergic patients should know about the link between allergic rhinitis and asthma
Allergy is the most common chronic disease in Europe, and its prevalence is growing. Today, 80 million adults in Europe suffer from allergies and it is estimated that by 2015, every second person might be suffering from at least one form, including allergic rhinitis, asthma, eczema and food allergies.

In close collaboration with scientific societies and patient associations, the European Union has expressed its commitment to addressing this important public health issue by supporting GA²LEN.

GA²LEN is a European network that brings together the best experts, research centres and patient organisations from across Europe. The aim of this “network of excellence” is to enhance the quality of research on all aspects of the disease and to rapidly communicate the findings with a view to reducing the overall burden of allergy and asthma.

The network approach recognises the need for constant dialogue between researchers, doctors, patients and policy makers. Effective prevention and treatment rests on raising awareness among all these players and the rapid translation of research findings into clinical practice.

For a better management of allergies in Europe

www.ga2len.net
Sneezing and Wheezing

“I can't breathe through my nose.
I'm short of breath.
Is this related?”

Do you - or members of your family - suffer from allergic rhinitis (also know as “hay fever” when caused by pollen)? If yes, we suggest you read the following brochure carefully.

If the patient has both allergic rhinitis and asthma, the effective treatment of allergic rhinitis can help manage asthma better.

Allergic rhinitis is a major risk factor for the development of asthma.

This means that any person who has allergic rhinitis is much more likely to develop asthma than a person who does not have allergic rhinitis.

Typically, the symptoms of allergic rhinitis are sneezing, nasal blockage, runny and itchy nose and redness of the eyes.

Rhinitis and asthma can also be non-allergic.
Thinking about symptoms

Sneezing - Do you have allergic rhinitis?

Tell your doctor about any symptoms that may indicate allergic rhinitis or asthma. Review the checklist to prepare yourself for your consultation with the doctor. See if you can work out what some of the causes may be.

Are the problems related to your nose?

Ask yourself the following questions. Your answers will be helpful in eliminating alternative diagnoses, such as the common cold.

1. During the past year, have you had daytime blocked nose, an itchy nose, mucus secretion in throat, sneezing and a runny nose/rhinorrhea - or at night - a blocked nose, sleep disorder, awakenings during the night with symptoms, which do not seem to be caused by a common cold?
   - yes
   - no

2. When do the symptoms mentioned above occur?
   - winter
   - spring
   - summer
   - autumn
   - no clear variation, the symptoms are persistent

3. For how long do the symptoms occur?
   - less than 4 days a week or less than 4 weeks in a year (intermittent)
   - more than 4 days a week or more than 4 weeks in a year (persistent)

4. Do these symptoms restrict your regular activities at home or at work, your hobbies or your sleep?
   - yes
   - no

What are allergies?

While for the majority of the population, contact with certain allergens in dust or from a dog, cat or tiny animals or from pollen in the air does not create a problem, it can lead to allergy and asthma symptoms in others. Such people are “allergic”.

The symptoms of allergy can vary in nature (sneezing, coughing, wheezing, breathlessness and skin rashes) and in severity. They are an exaggerated response from the immune system.

The disease often progresses from atopic dermatitis to allergic rhinitis and then to asthma. This evolution, known as “allergy march”, needs to be carefully followed and treated.

Allergic rhinitis

Allergic rhinitis - also known as hay fever when triggered by pollen - is allergy with nasal symptoms caused by outdoor allergens (such as plant pollens or mould) and by indoor allergens (such as animal danders, indoor mould or house dust mites) in people who are allergic to these substances. Symptoms may be persistent. In some cases, the eyes can also be affected.
Wheezing - Do you have asthma?

Do you suffer from wheezing, shortness of breath, cough and chest tightness?

If you suffer from one of the following symptoms - wheezing (a whistling sound when you breathe), shortness of breath, coughing and chest tightness - it can mean that you also have a concomitant allergic inflammation in your lower airways, called asthma.

If you have asthma, you will need to learn what things cause your asthma symptoms and how to avoid them. Your doctor will also prescribe medicines to keep your asthma under control.

When your asthma symptoms become worse than usual, it is called an asthma episode or attack. During an asthma attack, muscles around the airways tightened up, making the airways narrower so less air flows through.

Inflammation increases, and the airways become more swollen and narrower. Cells in the airways may also make more mucus than usual. This extra mucus also narrows the airways. These changes make it harder to breathe.

Taking care of your asthma is an important part of your life. Controlling it means working closely with your doctor to learn what to do, staying away from things that bother your airways, taking medicines as directed by your doctor, and monitoring your asthma so that you can respond quickly to signs of an attack.

By controlling your asthma every day, you can prevent serious symptoms and take part in all activities.

It is important that you have your condition properly diagnosed by your doctor before starting any medication.

Asthma

Asthma is a chronic disease that affects the airways (bronchi) of the lungs.

Asthma is caused by inflammation in the airways. The inflammation irritates the muscles around the airways, and causes them to tighten (constrict). This causes narrowing of the airways.

It is then more difficult for air to get in and out of the lungs. This leads to wheezing and breathlessness.

The inflammation also causes the lining of the airways to make extra mucus, which causes a cough creating further obstruction to airflow.
Does sneezing lead to wheezing?

Thinking about symptoms

Allergy symptoms

They can vary depending on what is causing the reaction and the part of the body where the reaction occurs. Symptoms can include:

- red, watery, itchy eyes
- sneezing, congestion, blocked nose, runny and itchy nose
- throat clearing (mucus secretion in throat)
- coughing
- shortness of breath
- wheezing
- hives (skin wheals) - skin rashes

Atopic eczema

Eczema is sometimes called dermatitis which means “inflammation of the skin”. There are different types of eczema. The most common type is atopic eczema. In this type of eczema there is a typical pattern of skin inflammation which causes the symptoms.

The word “atopic” describes people with certain “allergic” tendencies. However, atopic eczema is not just a simple allergic condition. People with atopic eczema have an increased chance of developing other “atopic” conditions such as asthma and hay fever.

Never consider allergic rhinitis as trivial!

Attentive management of allergic rhinitis in children and adults can contribute to better management of asthma, which is increasingly common in Europe.

Children are particularly vulnerable to allergic rhinitis. The prevalence of allergic rhinitis is between 10-20% in young school children and ranges from 15-30% in teenagers. While the condition may have its onset when the child is 3 or 5 years' old, peak incidence occurs later in childhood and early adolescence.
Tests and treatments

Accurate diagnosis of allergies will lead to appropriate therapeutic options. To help diagnose allergic rhinitis, your doctor will examine you and will make some tests.

Medical history
It is the basis of allergy diagnosis: discussion between patient and doctor about the symptoms and patient experience.

Physical examination on different organs
- **Nose:** For swollen nasal mucous membranes and structural defects.
- **Eyes:** To check if they are swollen, watery or red, or to assess whether you have other signs of long-term (chronic) allergies.
- **Sinus areas:** For tenderness and signs of infection.
- **Mouth:** To see whether you have signs of physical changes as a result of breathing only through your mouth.
- **Chest and lungs:** For signs of infection or asthma.
- **Skin:** For signs of allergy, such as hives or eczema.

Tests
Tests can be done to confirm the diagnosis. Allergy testing involves having a skin or blood test to determine what substance (allergen) may trigger your allergy (Skin-prick tests / Specific IgE in vitro tests / other in vitro tests).

These involve no risk and are painless.

Treatment
A wide range of treatment options exists for allergic rhinitis and the diagnosis made by your doctor will enable prescribing the most appropriate for your needs:

- Medication to be taken by mouth: antihistamines, antileukotrienes.
- Medications to be applied locally: nasal glucocorticosteroids, ophthalmic antihistamines, intranasal H1 antihistamines, cromones, decongestants.
- Treatment using other forms of administration: immunotherapy (sub-cutaneous, sublingual).
- Avoidance measures - when possible - are also part of the treatment.

Co-existing conditions
Allergic rhinitis and asthma often co-exist. Indeed, about 80% of asthmatics have some form of rhinitis and approximately 15-30% of allergic rhinitis patients have asthma.

In some studies, patients with both conditions showed asthma symptoms improved with an efficient treatment of allergic rhinitis.

Combination therapies
In some cases, a combination of medications can be prescribed to achieve treatment goals.
Playing your part

Avoidance measures

- Allergen avoidance is effective when total avoidance of the allergen can be achieved. This is the case of pollen allergy, since patients do not experience symptoms outside the pollen season or for food allergy.

- However, even for mite allergy, total avoidance (e.g. patients staying in a mountain area for several months) is incompletely effective because most patients are polysensitized and inflammation can often persist without mite exposure.

- Single measures of mite control such as mite encasing or vacuum cleaning are usually insufficient to reduce the allergen load.

- In patients with a demonstrated sensitization and with symptoms of allergy to furred pets kept indoors at home it is recommended to get rid of the animal in order to reduce allergen exposure at home.

You can help in the management of your allergies!

To ensure optimal care, you can take an active role in your treatment by asking questions, learning about the triggers of your condition, and understanding the reasons for various methods of treatment.

Open communication is a necessary, successful part of allergic disease management. The best results are achieved when patients or carers are fully informed and involved.

Allergy prevention

Avoid smoking and exposure to tobacco smoke, particularly during pregnancy. Do not expose children to tobacco smoke.

The quality of indoor air at home, in school and at the workplace also plays an important role.

When possible, breast-feed exclusively until 4-6 months.

Allergen avoidance

If you can identify what may be causing allergic rhinitis or any other allergy, it may be possible to reduce the symptoms by avoiding or lessening contact with the “allergen”. It is therefore worthwhile to give this some thought.

If you have ideas on what might be causing the allergy and how you could help avoid exposure, tell your doctor.
Medication

If you have received a prescription for treatment, make sure you understand how and when to use the medication.

The effectiveness of your treatment and the safety of the medication should be evaluated with your doctor.

If your doctor has given you an emergency plan, share it with a family member or friend who can help you during an emergency. You must be prepared for rapid action.

If you are prescribed long-term treatments, be aware that even if they do not produce immediate relief of symptoms, they are very important. Troublesome consequences may result from stopping a prescribed treatment on your own.

Gaining control with written plans for asthma

Once you have started on your medication, it can be very helpful for your future visits to the doctor to write down the following information to help handle or avoid future exacerbations:

- Any cases of your forgetting to take or use the medication and the consequences.
- Any changes in symptoms
- Any side effects of the treatment

Remember, following your treatment is the best way to improve control of your disease!

Playing your part

- Learn about your disease.
- Proper use of medication is essential if control of your disease is to be improved.
- Be sure to take the correct dose of prescribed medication at the correct intervals.
- Do not stop taking your medication without consulting your doctor!
- Remember that the treatment of allergic disease is mostly long-term!

Contact info

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“Quality of life” focuses on patients' perception of their disease and measures impairments that have a significant impact on the patient's well-being or activities.

Quality of life also analyses the social repercussion of a disease.

Similar symptoms may vary in the effects they have on different individuals.

Tools, such as validated questionnaires, assess the severity of the disease.

The goal is to prescribe a therapy that reduces those impairments that patients consider important and to prevent developing complications.
This campaign is conducted by GA\(^2\)LEN and EFA (European Federation of Allergy and Airways Diseases Patients Associations - www.efanet.org).

Supported by an educational grant from Phadia and UCB