

Is it an allergy or is it sinusitis?

F Farrer

Republished with permission *SA Pharmacist's Assistant* 2018;18(3):25-26

Prof Nurs Today 2019;23(3):4-6

Many people suffer from allergies and sinusitis, but because these conditions have similar symptoms, sometimes patients become confused and do not use the optimal treatment for their particular problem.^{1,2}

Allergies

Allergy symptoms become apparent when the patient comes into contact with an allergen. The immune system recognises the allergen as an invader and produces specific antibodies. Histamine is released into the body, causing itchy, watery eyes, headaches, sneezing and nasal and sinus congestion. Some people with allergies experience seasonal symptoms to specific tree or grass pollens, and others have year-round problems with dust, moulds, and animal dander.^{2,3,4}

Sinusitis

Sinusitis is an inflammation of the sinuses with symptoms of nasal congestion, runny nose, post-nasal drip and headache. The sinuses are air-filled cavities within the bones of the cheeks, behind the forehead and eyebrows and on either side of the nose. They are lined with a thin layer of mucus that traps dust, germs and other particles. Tiny hairs or cilia in the sinuses move the mucus towards the back of the throat. Increased mucus production due to a viral, bacterial or fungal infection may block the sinuses. This leads to swelling of the nasal tissues with painful sinus congestion. An allergic response to an allergen such as pollen, chemicals or animal hair can also cause congestion in the sinuses.^{2,3,4}

Acute sinusitis may resolve within ten days but can last up to eight weeks. It is often caused by an infection as a complication following a cold. Chronic sinusitis lasts longer than three months and may be caused by unresolved infections, or by allergies. As the body tries to flush out inhaled particles causing allergies, the nasal and sinus passages become swollen, congested and inflamed. Asthma may also be linked to chronic sinus infection.^{3,4}

Symptoms

Symptoms of allergies and sinusitis can be similar. Headaches, congestion and nasal discharge are common to both conditions. Table I lists common symptoms of allergies and sinusitis.

Table I. Symptoms of sinusitis and allergies^{1,3}

Symptom	Sinusitis	Allergy
Facial pressure/pain	Yes	Sometimes
Duration	10–14 days	Varies
Nasal discharge	Thick, white or coloured	Thin, watery, clear
Fever	Sometimes	No
Headache	Sometimes	Sometimes
Pain in upper teeth	Sometimes	No
Bad breath	Sometimes	No
Coughing	Sometimes	Sometimes
Nasal congestion	Yes	Sometimes
Sneezing	No	Sometimes
Watering, itchy eyes	No	Sometimes

Treatment

Allergies

Prevention is the most effective way to manage allergies. Minimising exposure to known allergens decreases symptoms. Antihistamines and decongestants are frequently used for the treatment of allergy symptoms. Antihistamines prevent the actions of histamine and block the allergic response, easing the congestion, the runny nose, sneezing and itching. Intranasal corticosteroids may be indicated to reduce inflammation in patients with allergic rhinitis. Some patients may require long-term oral antihistamine treatment for the treatment of chronic allergies.^{2,3}

Sinusitis

If the sinus inflammation is caused by allergies, antihistamines may offer some symptom relief. Nasal decongestants may help to decrease nasal inflammation and allow drainage of the sinuses but can only be used for 3–4 days as continued use may cause a “rebound” effect, worsening symptoms. Intranasal corticosteroid preparations are useful and can be used on a regular basis.^{2,3,4}

Antibiotics are sometimes used to treat bacterial sinus infection. Antibiotics should only be used when necessary so as to prevent the development of antibiotic resistance.^{2,3,4}

Saline solutions are recommended for “washing” the sinuses and mobilising the thickened mucus.^{2,3,4}

Conclusion

Allergies and sinusitis may present with similar symptoms but can be differentiated by cause and the absence or presence of other symptoms. Allergies are not caused by sinus problems, but sinusitis may be caused by allergies.

Bibliography

1. Difference between sinusitis and allergies. Advanced ENT and Allergy [Internet] (Accessed 14 Aug 2018) Available from: <http://www.advancedentandallergy.com/difference-between-sinusitis-allergies.php>
2. Is it sinusitis or allergies? WebMD [Internet] (Accessed 14 Aug 2018) Available from: <https://www.webmd.com/allergies/sinusitis-or-allergies>
3. Allergies and sinusitis. Otolaryngology Associates, PC [Internet] (Accessed 14 Aug 2018) Available from: http://www.otolaryngology-assoc.com/our_services/allergies_sinusitis.aspx
4. Sinus Infection. American College of Allergy, Asthma and Immunology. [internet] (Accessed 18 Aug 2018) Available from: <https://www.acaai.org/allergies/types/sinus-infection>