GP (FOLLOW UP) CONSULTATION

ALLIANCE
ADVANCING TOGETHER IN ALLERGY CARE

ASTHMA AND ALLERGIC RHINITIS
PATIENT 1 – LUCAS (35 YEARS OLD)

"My nose is constantly blocked and I keep **sneezing, coughing and wheezing.** I continue to struggle with my breathing every evening despite using my new asthma inhaler.

I have also been **using nasal sprays and nasal irrigation** with saline for the last 2 weeks as you recommended for my hay fever.

These treatments have provided some hay fever relief, but **I still can't sleep properly**, and **my asthma is still an issue."**

1. MEDICAL HISTORY

- Maternal family history for asthma
- Asthma diagnosis at the age of 21:
  - Symptoms were infrequent and mild (short-lived wheeze)
  - He was prescribed a short-acting beta-2-agonist (SABA) inhaler[1]
- The trigger for asthma was not identified at the time but the patient believes it may have been related to the mould present in his bedroom when he was a student. He has checked his current flat and does not see any mould
- He has had 5 asthma exacerbations since this diagnosis, two of which happened in the last 2 months. The SABA inhaler failed to control the symptoms of his last two asthma exacerbations, so he consulted his GP
- Previous testing for asthma: fractional exhaled nitric oxide (FeNO) test – 25 ppb*, positive bronchodilator reversibility test[1]
- Symptoms have been persistent for the last 4 months and coincide with him moving into a new flat (approximately 5 months ago). However, these improve when he is away from the flat
- He first presented at the GP surgery 7 weeks ago and has had another GP consultation since
  - At the last consultation, he was prescribed an intranasal antihistamine for his rhinitis[2] and a low-dose corticosteroid inhaler to be used twice a day[1]
- He has no pets but his long-term girlfriend has a cat

2. PHYSICAL EXAMINATION

- Nasal congestion
- Eyes are swollen and red
- Mild wheezing
- Dark discolorations of the periorbital skin
- No fever

3. GP INVESTIGATION

"Lucas has persistent **moderate-to-severe allergic rhinitis**[2] in addition to asthma. His symptoms appear to **coincide with his move into his new flat.**

Despite the use of inhaled corticosteroids and intranasal antihistamines, his asthma and allergic rhinitis remain problematic. I have checked **his inhaler technique** and he is **using it correctly.**[1] He also states that he adheres to all his treatments. Therefore, I will **prescribe him a leukotriene receptor antagonist (LTRA)** in addition to the **low dose of inhaled corticosteroids** for this asthma,[1] and an **intranasal corticosteroid** for his allergic rhinitis.[2]

We are **still unsure of what triggers** Lucas's symptoms so I will carry out **specific IgE testing for dust mites, cat dander** and the moulds ***Alternaria alternata*** and ***Aspergillus fumigatus."***

4. TEST RESULTS

- Specific IgE tests for dust mites, moulds and cat dander were carried out: dust mite (*D. pteronyssinus:* 7.2 kU_A/l), *Alternaria alternata* (2.7 kU_A/l), *Aspergillus fumigatus* (0.14 kU_A/l) and cat dander (0.31 kU_A/l).

5. GP ACTION

According to his history, Lucas appears to be sensitised to both Alternaria alternata and dust mites. For symptomatic relief, he was told to use the prescribed intranasal corticosteroids for his allergic rhinitis[2] and a low-dose corticosteroid inhaler with LTRA for his asthma.[1]

RECOMMENDATIONS GIVEN TO LUCAS:[2]

- Use synthetic pillows and acrylic duvets and avoid having soft toys on the bed
- Wash all bedding and soft furnishings at least once a week at high temperatures
- Choose wooden or hard floor surfaces instead of carpets, if possible
- Fit blinds that can be wiped clean instead of curtains
- Wipe surfaces regularly with a clean, damp cloth

However, Lucas's response to treatment was reviewed after 4 weeks[1,2] and his symptoms have only marginally improved. **He was therefore referred onto an allergist. (See next page)**

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ALLERGIST CONSULTATION

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"I have **reviewed Lucas's medical history** and carried out a **physical examination**. It appears that Lucas is **sensitised to *Alternaria alternata*** and **house dust mites**. I will confirm this with a skin prick test[2] and send him for a nasal challenge test[4] using dust mite extract and *Alternaria alternata* extract.

His symptoms continue to be problematic despite implementing the GP's recommendations and correctly adhering and using his medication. Therefore, instead of an LTRA, I will prescribe him a **long-acting beta-2-agonist (LABA)** to be used **in combination with his low-dose corticosteroid inhaler.**[1,5]"

1. TEST RESULTS

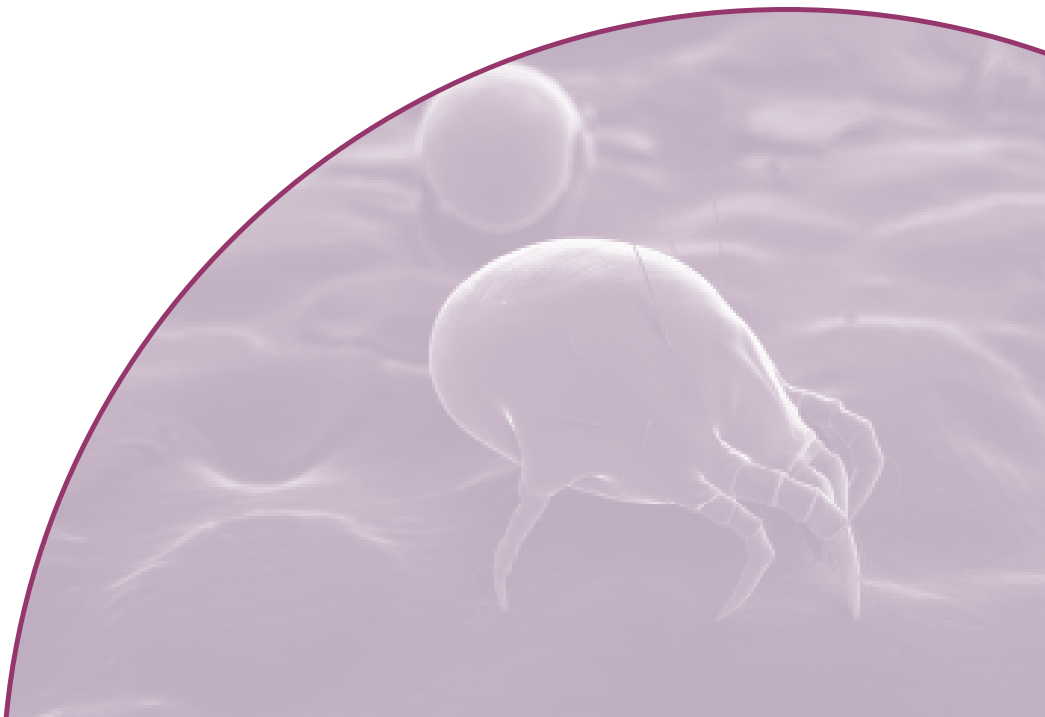
- Skin prick testing: *Alternaria alternata* (3 mm wheal), house dust mite (8 mm wheal)
- Nasal challenge test using dust mite extract – positive

2. ALLERGIST ACTION

Lucas was prescribed allergen immunotherapy to improve his dust mite-triggered upper and lower airway symptoms.[6–8] More specifically, house dust mite sublingual immunotherapy (SLIT) was prescribed.[3,5]

3. REFERENCES

1. NICE CKS. Asthma. 2018. Available at: https://cks.nice.org.uk/asthma#!scenario [accessed October 2019]
2. NICE CKS. Allergic Rhinitis. 2018. Available at: https://cks.nice.org.uk/allergic-rhinitis [accessed October 2019]
3. NICE guidance. Asthma: diagnosis, monitoring and chronic asthma management. 2017. Available at: https://www.nice.org.uk/guidance/ng80/chapter/Recommendations [accessed October 2019]
4. Akdis CA, Hellings PW, Agache I (Editors). Global Atlas of Allergic Rhinitis and Chronic Rhinosinusitis. 2015. European Academy of Allergy and Clinical Immunology.
5. GINA. Global Strategy for Asthma Management and Prevention. 2019. Available at: https://ginasthma.org/wp-content/uploads/2019/04/GINA-2019-main-Pocket-Guide-wms.pdf [accessed November 2019]
6. Seidman MD & Gurgel RK. Clinical Practice Guideline: Allergic Rhinitis. *Otolaryngol Head Neck Surg.* 2015;152(15):S1–S43
7. Walker SM, Durham SR, Till SJ, et al. Immunotherapy for allergic rhinitis. *Clin Exp Allergy.* 2011;41: 1177–1200
8. EAACI. Allergen Immunotherapy Guidelines – Part 2: Recommendations. 2017. Available at: https://www.eaaci.org/documents/Part_II_-_AIT_Guidelines_-_web_edition.pdf [accessed November 2019]



*FeNO tests – a FeNO level of 40 parts per billion (ppb) or more can be considered a positive test in individuals aged 17 and over. For children and young people (aged 5 to 16), a FeNO level of 35 ppb or more can be considered a positive test.1,3 For more information, please see the NICE guidelines on asthma.