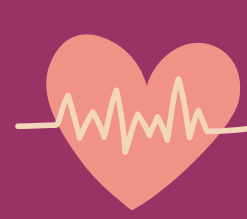




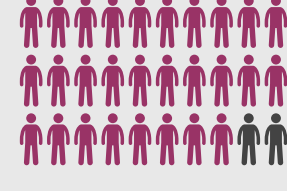
Allergy Management in primary care



Today, more than 150 million Europeans suffer from chronic allergic diseases¹



It is expected that by 2025, more than 50% of all Europeans will suffer from allergy¹



Worldwide, allergy prevalence is expected to reach up to 4 billion by 2050²

45%

of EU patients with allergic disease have never received an allergy diagnosis and are also likely to be misdiagnosed.¹

Most cases of allergic disease can be **diagnosed and managed in primary care**, provided there is access to **health services** and **essential medicines**.² A greater number of allergic patients being managed in primary care may help to reduce waiting times to specialist care by focusing scarce resourcing on those who most need it.⁴

Therefore, allergy education in primary care is urgently needed to improve patient outcomes.



The role of primary care physician support³

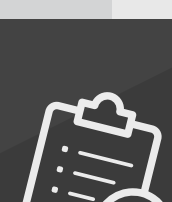
- 1 Consider patient's medical history, family history and allergy symptoms
- 2 Conduct physical examination
- 3 Carry out an allergen-sensitisation test (Allergen-specific IgE antibody test and skin prick test)

The pillars of diagnosis:

History taking, symptoms, examination, diagnostic tests

History taking can be conducted by **physicians or other primary healthcare professionals** with the appropriate competencies. History taking includes **allergy-focused questions** to examine:⁵

- General medical history
- Allergy history
- Food-related symptoms
- Respiratory-related symptoms
- Ear, nose and throat-related symptoms
- Skin-related symptoms



During a physical examination, attention should be paid to **growth, physical signs of malnutrition** and **any signs indicating allergy related co-morbidities**, such as **atopic eczema, asthma, and allergic rhinitis**. These findings may indicate atopic conditions which were previously undiagnosed and may not be obvious from your patient's history.⁵



Symptoms



Allergy symptoms range from relatively **mild to severe** and **life-threatening** indications.²

Allergic reactions include:²

- **Hay fever (or allergic rhinitis):** For reactions involving the nose.
- **Ocular allergies (or allergic conjunctivitis):** They affect the eyes and they are usually accompanied by hay fever.
- **Allergic asthma:** Breathlessness or shortness of breath because of reduced lung capacity to hold air.



Food allergen ingestion, inhalation and skin contact can give rise to a spectrum of symptoms such as:⁷

- **Skin reactions:** urticaria, angioedema, atopic eczema or dermatitis
- **Gastrointestinal problems:** vomiting, colic, abdominal pain, diarrhoea, constipation
- **Circulatory abnormalities:** cardiovascular collapse

Allergen-specific IgE antibody testing

Diagnostic tools

Skin prick testing (SPT)

Allergen-specific IgE antibody tests are more frequent in primary care in lieu of referral to an allergist immediately.⁸

Allergen-specific IgE antibody tests may be more readily accessible to primary care providers since office staff need not to be trained to perform them and they pose no risk to the patient since direct allergen exposure is avoided. Antihistamines do not affect allergen-specific IgE antibody tests.⁸

There are two types of allergen-specific IgE antibody tests:⁹

- **Whole allergen blood tests:** They are able to detect only allergen-specific IgE antibody reactions
- **Component-resolved tests:** They help to detect the sensitisation against individual components of the allergic source, in case of multiple IgE sensitivities

SPTs can only be conducted by **trained employees**.⁷ Unlike allergen-specific antibody tests that are indicated for all allergic diseases, SPTs may be unsuitable for patients who have extensive atopic dermatitis or other skin conditions, or those who are using oral antihistamines at the time of testing.^{9,11}

The **sensitivity and specificity** of both methods are **dependent on the allergen studied**. In clinical practice, both tests may be useful based on **clinical history and obtained findings**.¹²



References: 1. EAACI Advocacy Manifesto (accessed April 2020) 2. Akdis CA, Agache I. Global Atlas of Allergy. EAACI. 2014; 3. Wesslesler M. Mayo Clin Proc. 2009; 84(8): 707-717. 4. Flokstra de Blok et al. Journal of Asthma and Allergy. 2017; 5. RCPCH. Allergy Focused Clinical History. 2011; 6. NICE. 2011; Clinical Guideline 116. 7. Muraro A et al. Allergy. 2014; 69(8): 1008-25. 8. Birch & Pearson-Shaver. Allergy Testing. 2020; NBK537020 9. Portnoy JM. Mo Med. 2011; 108(5): 339-43. 10. Ansotegui et al. World Allergy Organisation. 2020; 13:100080 11. Appropriate use of allergy testing in primary care. Best test. 2011; 1-12. 12. Bignardi et al. Allergol Select. 2019; 3(1): 9-14.

Treatment

Most of allergy symptoms can be treated with medication such as:¹³

- **Oral antihistamines and decongestants** For allergic rhinitis and allergic conjunctivitis.
- **NSAIDs** To temporarily reduce pain, swelling, and cramping.
- **Steroid ointments or creams** For local skin reactions



Referral to secondary care

There are no guidelines to define when it is the optimal time for secondary care referral yet, but it is recommended for:¹⁴

- Patients with severe or complex allergies
- Desensitisation immunotherapies (e.g. inhalant, venom etc.)
- Evaluation of immune competence
- Chronic or recurrent conditions

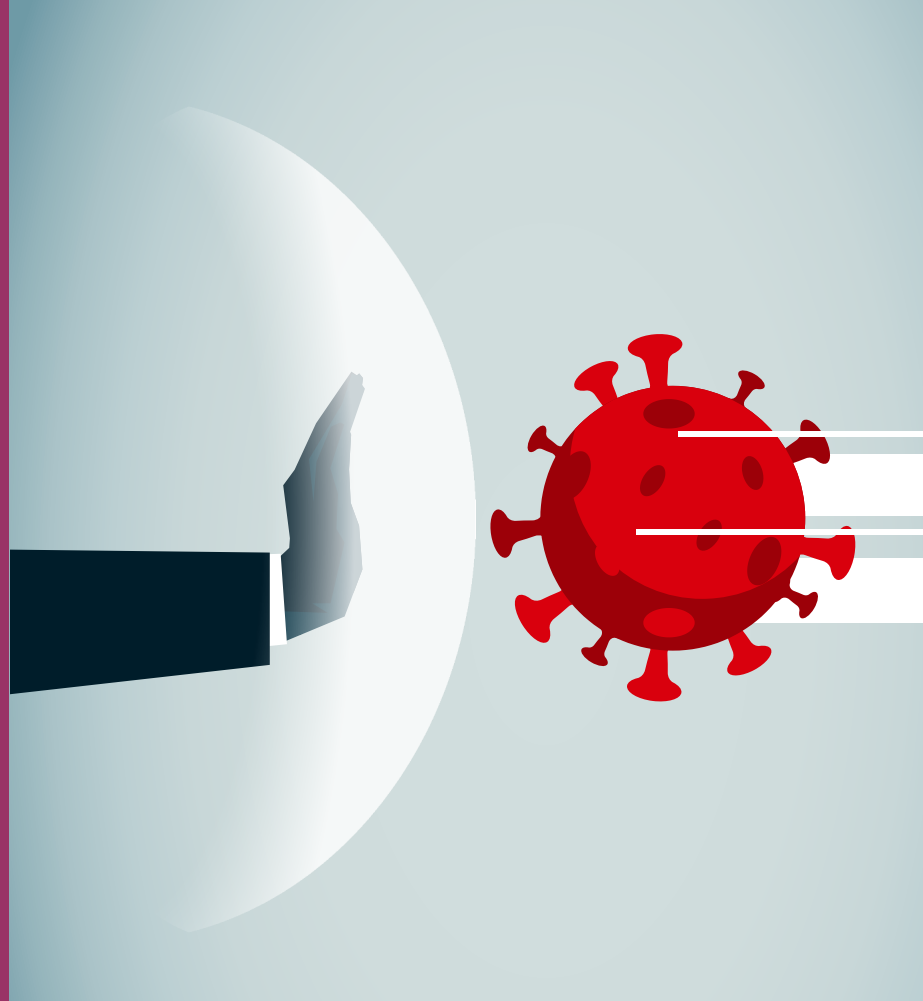
Management of allergic diseases during and beyond COVID-19

Adult and paediatric patients with common allergic diseases are not at greater risk of acquiring COVID-19 or developing more severe symptoms.^{15,16} However, some respiratory symptoms are similar between seasonal allergies and COVID-19.

DIAGNOSIS: Serological detection of virus-specific IgM and IgG antibodies can confirm COVID-19 infection.¹⁷

Allergen-specific IgE antibody testing is the preferred diagnostic method to be used to support allergy diagnosis in order to maintain social distancing.¹⁸

MANAGEMENT: Patients should continue their indicated therapy, unless they are experiencing an acute respiratory tract infection. All allergy facilities should have COVID-19 preparedness, relevant infrastructure and control measure policies. Telemedicine should be encouraged, if possible. In case of a complication, a secondary care referral is recommended.¹⁷



Allergy management summary

Primary care services have a crucial role to optimal management of allergy. Key steps to be followed in a primary care setting include:

- 1 Carry out history taking, physical examination and diagnostic tests to decide whether the patient presents with an allergy disorder or not
- 2 Provide services to relieve the symptoms
- 3 In a follow-up consultation: distinguish the cases that need specialist care assessment (challenge tests, allergen immunotherapy etc.)



References: 13. <https://www.nhs.uk/conditions/allergies/> 14. BSACI 2004; guideline HC 696-1 Ped Allergy Immunol. 2011; 23(4):347-52 15. Brough et al. Pediatr Allergy Immunol. 2020; doi:10.1111/pai.13262 16. Bosquet et al. Allergy. 2020; doi:10.1111/all.14302 17. Klimek et al. Allergy. 2020; doi:10.1111/all.14336 18. Whyte et al. BSACI Guidelines for Adults. 2020;