

GP (FOLLOW UP) CONSULTATION



NUT ALLERGY

PATIENT 6 - HANNAH (4 YEARS OLD)

At a birthday party last Friday, our daughter Hannah developed hives across her body, swelling in the face and had difficulty breathing.

We took her to the emergency services where she was given an **injection of adrenaline**. She was kept in hospital overnight and was discharged the following day as she no longer had any symptoms. We were told to closely monitor her throughout the weekend.

An 'adrenaline auto-injector' was also provided in case any symptoms reappeared. If everything remained stable, they recommended we consult our GP for a follow-up appointment."

- The patient's mother, Sara

1. MEDICAL HISTORY



- Personal history of mild eczema uses emollients to control her symptoms when she has a flare-up
- Urticaria appeared first and progressively worsened, appearing on the neck and arms
- Swelling began around the same time that the urticaria appeared
- Wheezing developed within 30 minutes of the appearance of urticaria and swelling
- The family (parents and 6-year-old sibling) have no known allergies to any foods or respiratory allergies
- At the birthday party, the patient ate:
 - o A variety of sandwiches (egg, tuna, ham and peanut butter), chocolate and a slice of birthday cake (containing gluten and milk) before she left
- The patient has previously consumed eggs, chocolate, tuna, ham and cake in the past with no obvious symptoms
- Parents could not recall the last time she had any form of nuts or if she has ever had any nuts

2. PHYSICAL EXAMINATION



 Hannah's skin was clear and her breathing was normal

R. GP INVESTIGATION



Hannah's medical history and rapid onset of allergy symptoms suggest a

possible IgE-mediated food allergy.1

This could be in response to nuts as she has recently consumed the other foods. Her serious symptoms mean she needs to be **referred to a paediatric allergist.**¹

Meanwhile, I will request **specific IgE testing for peanuts**', advise the patient to **avoid nuts**² and prescribe an **adrenaline auto-injector.**²⁷

4. TEST RESULTS



Results: peanut (10.2 kU,/I).

5. GP ACTION



Hannah may have a peanut allergy as she appears to be sensitised to whole peanut extract.

She was referred to an allergist for a full risk assessment and an appropriate management plan.² (See next page)

Hannah's parents were given leaflets with information on peanut allergy.¹



ALLERGIST CONSULTATION

Using the GP's notes and Hannah's specific IgE tests as a reference, a medical history was collected, and a physical examination of the skin and chest was carried out.



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Hannah's specific IgE test results show that she is sensitised to peanuts. I will carry out a skin prick test to confirm this and evaluate sensitisation to other nuts.

Her medical history suggests that she has a **primary allergy to peanuts** as opposed to a case of **pollen–food syndrome.**³ Some allergens in peanuts can **cross-react with other nuts;**⁴ therefore, **component-resolved diagnostics** will be carried out with a range of nut allergens."

3. REFERENCES

- NICE Guidance. Food allergy in under 19s: assessment and diagnosis. 2011. Available at: https://www.nice.org.uk/guidance/ cg116 [accessed September 2019]
- **2.** Ewan P, Brathwaite N, Leech S, et al. BSACI guideline: prescribing an adrenaline auto injector. *Clin Exp Allergy.* 2016;46(10):1258–1280
- **3.** Stiefel G, Anagnostou K, Boyle RJ, et al. BSACI guideline for the diagnosis and management of peanut and tree nut allergy. *Clin Exp Allergy.* 2017;47(6):719–739
- **4.** Bublin M & Breiteneder H. Cross-reactivity of peanut allergens. *Curr Allergy Asthma Rep.* 2014;14(4):426

1. TEST RESULTS

Skin prick test with extracts (wheal sizes): hazelnut (1 mm), peanut (5 mm), cashew nut (no wheal).

Component-resolved diagnostic test results:

HazeInut - Cor a 14 (0.2 kU₂/I), Cor a 9 (0.32 kU₂/I), Cor a 1 (0.87 kU₂/I)

Cashew nut - Ana o 3 (0.28 kU,/I)

Peanut – Ara h 2 (11.1 kU_{a}/I), Ara h 1 (8.8 kU_{a}/I)

Brazil nut – Ber e 1 (0.12 kU_A/I)

Walnut – Jug r 1 (0.34 kU_A/I)

2. ALLERGIST ACTION

Hannah is sensitised to the major peanut storage protein Ara h 2, indicating a primary peanut allergy.³ A comprehensive management plan including advice on avoidance of peanuts, recognition of nut allergy onset, treatment of allergic reactions and emergency treatments was given to both Hannah and her parents. Two adrenaline autoinjectors2 were prescribed for emergency use.³ Training on how to use the auto-injector was given to the family and child.²

RECOMMENDATIONS GIVEN TO HANNAH'S PARENTS:3

- It may be helpful to consult a dietician for dietary guidance
- Take extra care in reading food labels
- Liaise with restaurant staff when eating out to ensure a peanut-free meal is provided
- Management plans must be distributed across the wider family, friends and school

