



## GP CONSULTATION

“ I was very ill two days ago, **vomiting after my dinner**.  
I have had similar symptoms in the past and always thought it was food poisoning.  
However, this time **I noticed hives appearing across my body**. There was also a **tingling sensation within my throat** and **a lot of coughing**.”

### 1. MEDICAL HISTORY



- No personal or family history of allergy, eczema or asthma
- Meal before symptoms: seafood pasta with a glass of red wine
- Previous two occasions of similar symptoms also involved shellfish – shrimps and mussels
- Drinks wine on a weekly basis and does not experience any symptoms
- Has eaten shrimps in the past with no symptoms
- Does not recall having any symptoms with squid or octopus
- Has never eaten raw shellfish foods
- Tingling sensation and urticaria began within 30 minutes of starting the meal and vomiting/diarrhoea within an hour – symptoms improved after a few hours
- He did not exercise on the day
- No medications

### 2. PHYSICAL EXAMINATION



- No signs of urticaria
- No swelling in the throat or mouth
- Breathing was normal

### 3. GP INVESTIGATION



“ Oscar may have a **shellfish allergy**.  
The pictures on his phone show that he had urticaria on his face and arms.  
The **fast onset of symptoms**, the **urticaria**, the **vomiting** and **swelling around the oral cavity** are common with food allergies.<sup>1,2</sup>”

### 4. TEST RESULTS



- Specific IgE to shrimps (0.37 kU<sub>A</sub>/l)  
mussels (0.16 kU<sub>A</sub>/l)
- Total IgE: 22 kU/l

### 5. GP ACTION



“ Oscar’s medical history is **suggestive of an IgE-mediated shellfish allergy**.  
However, his **IgE blood tests are all quite low**, making his diagnosis inconclusive. I will **refer him onto an allergist for specialist testing that cannot be carried out by our facilities.**<sup>2</sup> (See next page)  
In the meantime, I have **trained him and provided him with a temporary adrenaline autoinjector** in case his symptoms return.<sup>1,3</sup>”



## ALLERGIST CONSULTATION

“Oscar’s medical history is **indicative of a shellfish allergy** but his IgE levels are low.

I will carry out a **skin prick test** and **component-resolved diagnostics with common seafood allergens**.

If these are not conclusive, I may **refer him to a hospital for an oral food challenge test.**”

### 1. TEST RESULTS

- Skin prick test was positive: shrimp (4 mm)
- Component-resolved diagnostics: rPen a 1 – shrimp: (2.2 kU<sub>A</sub>/l)



### 2. ALLERGIST ACTION

“Oscar is **sensitised to Pen a 1**, an important muscle protein in shrimps.

His allergy symptoms are very likely to be related to the shrimp he ingested. He should avoid foods containing shrimp.<sup>1</sup>

**Cross-reactions** with the **tropomyosin** found in lobster, crab and other crustaceans can also occur; therefore, he should also avoid the consumption of other crustaceans in general.<sup>4</sup>”

#### RECOMMENDATIONS GIVEN TO OSCAR

- Shellfish can be found in multiple foods – therefore, extra care must be taken when reading food labels to avoid exposure<sup>1,2</sup>
- He should be cautious when eating meals in restaurants as traces of shellfish in foods may lead to another reaction<sup>1</sup>

### 3. REFERENCES

1. ACCAI, 2019. Shellfish Allergy. Available at: <https://acaai.org/allergies/types/food-allergies/types-food-allergy/shellfish-allergy> [accessed October 2019]
2. NICE CKS. Food Allergy. 2018. Available at: <https://cks.nice.org.uk/food-allergy> [accessed October 2019]
3. Ewan P, Brathwaite N, Leech S, et al. BSACI guideline: prescribing an adrenaline auto-injector. *Clin Exp Allergy*. 2016;46:1258–1280
4. Lopata AL, Kleine-Tebbe J, Kamath SD. Part 22 of the Series Molecular Allergology: Allergens and molecular diagnostics of shellfish allergy. *Allergo J Int*. 2016;25(7):210–218

