



Questions for this month's clinical challenge are based on articles in this issue. The clinical challenge is endorsed by the RACGP Quality Improvement and Continuing Professional Development (QI&CPD) program and has been allocated 4 Category 2 points (Activity ID:12674). Answers to this clinical challenge are available immediately following successful completion online at <http://gplearning.racgp.org.au>. Clinical challenge quizzes may be completed at any time throughout the 2014–16 triennium; therefore, the previous months answers are not published.

Single completion items



DIRECTIONS Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the most appropriate statement as your answer.

Case 1 – Jenny Clarke

Jenny, a biology student aged 24 years, presents to you with increasing tiredness and recurrent mouth ulcers. She has no gastrointestinal symptoms and her weight has been stable. She is otherwise healthy. Although you feel it is clinically unlikely, you would like to exclude coeliac disease and you arrange for Jenny to have some blood tests.

Question 1

Which one of the following test results excludes the diagnosis of coeliac disease?

- A. Negative IgA-tissue transglutaminase (tTG) while on a gluten-free diet
- B. Duodenal atrophy seen on duodenal biopsy
- C. Negative HLA-DQ2 and HLA-DQ8
- D. Negative IgA-tTG with low total IgA
- E. Elevated tTG but normal DGP antibodies

Question 2

After further assessment, Jenny is found to have non-classical coeliac disease. Which one of the following dominates the clinical picture in this variant of coeliac disease?

- A. Gastrointestinal malabsorption
- B. Absent symptoms
- C. Abdominal bloating
- D. Extraintestinal symptoms
- E. Intermittent loose bowel actions

Question 3

The pathophysiology of coeliac disease is due to the immune response being triggered by which one of the following?

- A. Proline- and glutamine-rich proteins
- B. Small bowel activated proteases
- C. tTG amidates gliadin peptides
- D. Activated T helper cells
- E. Activated cytotoxic B helper cells

Question 4

The risk of which one of the following conditions is reduced by strict adherence to a gluten free diet?

- A. Small bowel lymphoma
- B. Type 2 diabetes
- C. B-group vitamin deficiency
- D. Obesity
- E. Constipation

Case 2 – Jack Martin

Jack, 6 months of age, has a runny nose and rash and is brought in by his parents. You notice that Jack has not been vaccinated. His parents explain that they have chosen not to have him vaccinated as they have a number of concerns about vaccination.

Question 5

Which one of the following is the least important parental concern about vaccination that you may wish to explore with Jack's parents?

- A. Vaccination safety
- B. Fear of the risk of autism due to vaccination
- C. The presence of toxic ingredients in vaccines
- D. Vaccines weakening the immune system
- E. Vaccination can cause encephalitis

Jack's parents have considered adopting a selective vaccination schedule, as they wish

to avoid certain immunisations, including measles vaccine. They have a number of concerns about its safety and feel that the risk of measles is very low in Australia due to herd immunity.

Question 6

What population vaccine coverage level is required to provide optimal herd immunity for measles?

- A. 75%
- B. 80%
- C. 85%
- D. 90%
- E. 95%

Question 7

Which of the following would best describe Jack's parents' position on vaccination?

- A. Unquestioning acceptor
- B. Cautious acceptor
- C. Hesitant
- D. Selective vaccinator
- E. Refuser

Question 8

Which of the following strategies might be helpful in reducing Jack's parents' decisional conflict regarding vaccination?

- A. Using graphic images and narratives to explain the risks of measles
- B. Showing them the vaccination schedule to emphasise that Jack is behind
- C. Strongly emphasising vaccine safety
- D. Challenging their scientific beliefs about measles vaccine
- E. Giving them an MMR decision aid fact sheet

Case 3 – May Lim

May is 4 years of age and she presents with her mother Tammy. May experiences frequent rashes around her mouth and often complains of abdominal pains. This has occurred since she has been eating solids,

from around 6 months of age. Tammy is worried that May could have a food allergy and suspects it is to soy.

Question 9

Which one of the following would confirm that May has an IgE-mediated food allergy to soy?

- A. A positive skin prick test
- B. Serum-specific IgE levels
- C. Both a positive skin prick test to soy and serum-specific IgE levels related to soy
- D. Abdominal pains and rash after eating soy and a positive skin prick test for soy
- E. Serum-specific IgA levels

Question 10

You refer May to an allergist and she is found to have an IgE-mediated allergy to soy. What advice would you give Tammy regarding treatment for May?

- A. She should avoid foods that contain more than 20% soy.
- B. Baked food containing soy may accelerate her development of tolerance to uncooked soy.
- C. Antihistamines will be of no benefit.
- D. Her allergy to soy will be lifelong.
- E. She needs to carry an adrenaline autoinjector.

Question 11

May also has symptoms consistent with intermittent allergic rhinitis. Which one of the following medications is not appropriate?

- A. Second-generation antihistamines
- B. First-generation antihistamines
- C. Intranasal corticosteroids
- D. Chromes
- E. Amoxicillin

Question 12

Tammy is currently 18 weeks pregnant. She would like to know if there is anything she can do to prevent her baby developing allergies. Which one of the following has been proven to be effective?

- A. Prebiotics during pregnancy
- B. Probiotics to the infant from birth
- C. Delaying the introduction of solids until 7–8months
- D. Avoiding potentially allergenic foods until at least 12 months
- E. Exclusively breastfeeding for the first 4–6 months

Case 4 – Zara

Rebecca is a new patient and comes to see you with her daughter Zara, aged 8 years, who has been troubled by recurrent episodes of non-specific abdominal pains for the past 12 months. Rebecca has been to several doctors and after a series of tests Zara has been diagnosed with functional gastrointestinal disorder (FGID). Rebecca has been reading around this topic on the Internet and, in her words, 'is now more confused than ever' about what this means. She is keen for you to explain what this problem is and advise on how best to manage Zara's tummy pains.

Question 13

In order to be sure that you, Rebecca and Zara are all discussing the same problem, an important first step is to clearly define the problem. Which one of the following is not part of the Rome III definition of FGID?

- A. Recurrent abdominal pain
- B. Recurrent eczematous skin rashes on the flexures
- C. Episodic diarrhoea
- D. Persistent/chronic abdominal pain
- E. Constipation

Question 14

It is important to ensure that the diagnosis of FGID is correct. Which one of the following pathology test results is consistent with this diagnosis?

- A. Raised total IgE levels
- B. Low serum albumin
- C. Elevated total serum iron binding capacity
- D. Positive anti-endomysial antibodies
- E. Normal serum magnesium

Question 15

Food intolerance is often considered to have a significant role in symptom generation in FGID. Which one of the following dietary components is least likely to cause FGID?

- A. Fructose
- B. Lactose
- C. Potassium iodide
- D. Galactooligosaccharides
- E. Polyols (sugar alcohols)

Question 16

Rebecca is keen to try a food elimination diet in an attempt to control Zara's symptoms. This is an ill-advised course of action that may lead to a number of adverse

outcomes. Which one of the following is the least likely adverse outcome?

- A. Excessive weight gain and obesity
- B. Failure to thrive
- C. Food aversions
- D. Eating disorders
- E. Increased risk of nutritional deficiency