



# SESSION 1

## DIET AND NUTRITION IN IBD: FOOD FOR THOUGHT

## INTERACTIVE CASE PRESENTATION

Joanna is a 23-year-old Master's student who you are meeting for the first time following her Crohn disease diagnosis last week. She has moderately severe ileocolonic inflammatory disease with elevated stool and serum markers.

She was previously healthy but over the last few months developed abdominal pain and diarrhea. She has eaten very little for 5-6 weeks, losing 7% of her body weight. She previously had a body mass index (BMI) of  $31 \text{ kg/m}^2$  and was not a 'healthy eater'.

## Decision Node 1

Joanna asks you whether she has Crohn disease because of her poor diet. Which of the following would be your response?

- a. Diet has nothing to do with getting Crohn disease; it is all your immune system.
- b. Had you followed a Mediterranean diet you would have been healthy.
- c. There is a list of specific foods that are proven to contribute to the pathogenesis of inflammatory bowel diseases (IBD).
- d. It is hard to conclude on an individual basis that what you ate caused the disease, but eating healthy is always recommended.

On physical exam, she appears pale and fatigued and has angular cheilitis. Her labs show a low albumin of 27 g/L and a hemoglobin of 103 g/L, along with low iron, vitamin D, and vitamin B12. She has a CRP of 33.2 mg/L and fecal calprotectin of 1,202  $\mu$ g/g.

You discuss a treatment plan with her and suggest starting prednisone with a plan to initiate an anti-IL-23 monoclonal antibody (mAb).

The medical student with you in the clinic asks whether the weight loss and abnormal nutrition lab results are a problem that needs to be addressed or whether they are 'just part of having Crohn disease.'

## Decision Node 2

Which of the following is true about assessing and treating malnutrition in IBD?

- a. If you treat the inflammation, malnutrition will always resolve itself.
- b. Nutritional assessment is an integral part of evaluating any new patient with IBD.
- c. Supplements are always indicated for newly diagnosed IBD patients.
- d. Malnutrition in IBD is almost completely driven by poor nutritional intake.



You decide to refer Joanna to a dietitian since you do not know much about *diet in IBD* (you had COVID when the lecture on diet in IBD was given during your gastroenterology fellowship).

Joanna tells you that she heard in her graduate class that diet and microbes might be important in multiple sclerosis (MS; she works on animal models of MS) and wonders if the same is true for IBD. She asks whether any specific diets can be used to treat her Crohn disease, either alone or with the other therapies you discussed.

## Decision Node 3

Which of the following is true about the options you could offer Joanna for induction of remission?

- a. Exclusive enteral nutrition does not work in adults.
- b. Diet therapy can be used as monotherapy or in combination with other treatments.
- c. The Crohn's disease exclusion diet (CDED) does not require teaching; patients can refer to a website and follow it.
- d. The specific carbohydrate diet (SCD) is supported by randomized controlled trials (RCTs).
- e. Most diet therapies work by introducing foods that directly reduce inflammation

Joanna decides to take a corticosteroid, but also starts the CDED. Determined to do anything she can to control her inflammation, she starts anti-IL-23 therapy two weeks later and stops the corticosteroid, as you feel that the addition of diet therapy provides the opportunity to significantly reduce her steroid exposure. She goes into remission quickly, which is maintained with her biologic and modified exclusion diet that she develops based on her experience with the guidance of an experienced IBD dietitian.

Upon follow-up 3 years later, Joanna is in prolonged remission following the same treatment course (CDED principles and anti-IL-23 therapy). She tells you she is planning on having children and wants to know how she can minimize the risk of her child developing IBD.

## Decision Node 4

What can you tell Joanna about preventing IBD in her child?

- a. Your child is at the same risk of developing IBD as the general population so they should just eat a normal diet.
- b. Breastfeeding is the nutritional intervention with the best evidence for preventing development of IBD.
- c. RCTs have shown that eliminating emulsifiers from infant formulas reduced Crohn disease risk by 43%.
- d. Given the link between infant allergies and IBD, early exposure to peanuts is recommended.