CANTERBURY
Endoscopy & Gastroenterology

Small Intestinal Bacterial Overgrowth (SIBO)

Normally, the vast majority of gut bacteria reside in the large intestine (colon). SIBO occurs when there is an abnormal increase in the population of these bacteria in the small intestine - especially the types of bacteria not typically found in small intestine.
Because the small intestine is responsible for absorbing nutrients, these bacteria begin to ferment food prematurely, leading to gas production and eventually interfering with your body's ability to absorb fats and vitamins.

What are the symptoms of SIBO?

SIBO can cause a wide variety of symptoms. Importantly, these symptoms also overlap with other gastrointestinal disorders such as 'irritable bowel syndrome'.
Symptoms of SIBO can include:

- Bloating
- Diarrhoea
- Abdominal pain
- Fatty stools (steatorrhea)
- Abnormal blood tests - High folate levels may be present, less commonly Vitamin B12 deficiency.

What causes SIBO?

Key risk factors which can lead to development of SIBO include:

- **Motility Issues:** Conditions which affect the normal movement of small bowel, such as diabetic autonomic neuropathy, scleroderma, or chronic opiate use.
- **Anatomic Changes:** Small intestinal diverticulosis, prior intestinal surgery, or resection of the ileocecal valve.
- **Associated Disorders:** SIBO can develop in association with Crohn's disease, Coeliac disease, chronic pancreatitis, IBS etc.

How is SIBO diagnosed?

There are two main tests which can be used for diagnosis of SIBO.

1. **Hydrogen & Methane Breath Test:** Human cells do not produce hydrogen or methane gas. As part of the test, patients ingest carbohydrate substrate - lactulose or glucose. As this pass through small bowel, in patients with high bacterial count, these get fermented and hydrogen or methane gas is produced, which is detected in breath. By checking amount of gas, and how quickly it is produced, this can indicate presence of bacterial overgrowth in small intestine.
2. **Duodenal / Jejunal Aspiration:** This involves directly sampling fluid from the small bowel during an endoscopy and quantifying bacterial colonies in laboratory.
   Please note, these tests are far from perfect, and several factors affect accuracy and validity of these test results. Please discuss further with your specialist.

How is SIBO treated?

1) Antibiotic therapy - This is the mainstay of treatment and involves intermittent courses of antibiotics based on symptom response.

2) Nutritional correction - This involves identification and treatment of any nutritional deficiencies in vitamins or minerals

Disclaimer: The information provided on this website is for educational purposes only and is intended to support, not replace, the relationship between a patient and their healthcare professional.

This information should not be used to diagnose or treat a health problem or disease. Always seek the advice of a healthcare professional regarding any medical condition or symptoms.