

Small bowel bacterial overgrowth

Definition

Small bowel bacterial overgrowth is a condition in which very large numbers of bacteria grow in the small intestine.

Alternative Names

Overgrowth - intestinal bacteria; Bacterial overgrowth - intestine; Small intestinal bacterial overgrowth; SIBO

Causes

Most of the time, unlike the large intestine, the small intestine does not have a large number of bacteria. Excess bacteria in the small intestine may use up the nutrients needed by the body. As a result, a person may become malnourished.

The breakdown of nutrients by the excess bacteria can also damage the lining of the small intestine. This can make it even harder for the body to absorb nutrients.

Conditions that can lead to overgrowth of bacteria in the small intestine include:

- Complications of diseases or surgery that create pouches or blockages in the small intestine. Crohn disease is one of these conditions.
- Diseases that lead to movement problems in the small bowel, such as diabetes and scleroderma.
- Immunodeficiency, such as AIDS or immunoglobulin deficiency.
- Short bowel syndrome caused by surgical removal of the small intestine.
- Small bowel diverticulosis, in which small, and at times large sacs occur in the inner lining of the intestine. These sacs allow too many bacteria to grow. These sacs are much more common in the large bowel.
- Surgical procedures that create a loop of small intestine where excess bacteria can grow. An example is a Billroth II type of stomach removal (gastrectomy).
- Some cases of irritable bowel syndrome (IBS).

Symptoms

The most common symptoms are:

- Abdominal fullness
- Abdominal pain and cramps
- Bloating
- Diarrhea (most often watery)
- Gassiness

Other symptoms may include:

- Fatty stool
- Weight loss

Exams and Tests

Your health care provider will perform a physical exam and ask about your medical history. Tests may include:

- Blood chemistry tests (such as albumin level)
- Complete blood count (CBC)
- Fecal fat test

- Small intestine endoscopy
- Vitamin levels in the blood
- Small intestine biopsy or culture
- Special breath tests

Treatment

The goal is to treat the cause of the bacterial overgrowth. Treatment may include:

- Antibiotics
- Medicines that speed intestinal movement
- Intravenous (IV) fluids
- Nutrition given through a vein (total parenteral nutrition – TPN) in a malnourished person

A lactose-free diet can be helpful.

Possible Complications

Severe cases lead to malnutrition. Other possible complications include:

- Dehydration
- Excess bleeding due to vitamin deficiency
- Liver disease
- Osteomalacia or osteoporosis

References

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