

Intestinal Ischemia: A Gut Disorder

Merina Rose*

Department of Gastroenterology and Human Nutrition, Monash University Clayton Campus, Melbourne, Australia

DESCRIPTION

Intestinal ischemia, also known as mesenteric ischemia, is a condition in which the blood flow to the intestines is reduced or completely blocked. This can lead to damage of intestinal tissue and even death if left untreated. Probiotics such as *Bifidobacterium infantis*, *Bifidobacterium lactis*, *Lactobacillus plantarum*, *Lactobacillus acidophilus*, *Saccharomyces boulardii* are good for gut health [1].

Causes

The causes of intestinal ischemia can be broadly classified into two categories such as acute and chronic.

Acute causes include the following;

Arterial thrombosis: This occurs when a blood clot forms in an artery that supplies blood to the intestines. This is the most common cause of acute intestinal ischemia.

Embolism: This occurs when a blood clot that forms elsewhere in the body travels through the bloodstream and gets lodged in an artery that supplies blood to the intestines.

Non-occlusive mesenteric ischemia: This occurs when there is reduced blood flow to the intestines due to low blood pressure, shock, or heart failure [2].

Chronic causes include the following;

Atherosclerosis: This is a condition in which the arteries become narrow due to the buildup of plaque. This reduces blood flow to the intestines over time.

Chronic mesenteric venous thrombosis: This occurs when blood clots form in the veins that drain blood from the intestines. This can lead to reduced blood flow to the intestines [3].

Symptoms

The symptoms of intestinal ischemia can vary depending on the severity and duration of the condition. Some of the common symptoms include

Severe abdominal pain: This is the most common symptom of intestinal ischemia. The pain can be sudden and severe or gradual and mild. It may be accompanied by nausea, vomiting, and diarrhea.

Bloody stools: This is a sign of intestinal damage due to reduced blood flow.

Abdominal distension: This occurs when the intestines become swollen due to the accumulation of gas or fluid [4].

Diagnosis

The diagnosis of intestinal ischemia usually involves a combination of physical examination, medical history, and diagnostic tests.

Physical examination: The doctor will examine the abdomen for signs of tenderness, distension, and rigidity. They will also check for signs of dehydration, fever, and shock.

Medical history: The healthcare professional will verify about any underlying medical conditions, such as heart disease, diabetes, or hypertension that may increase the risk of intestinal ischemia.

Diagnostic tests: The healthcare professional may follow one or more of the below tests in order to diagnose the intestinal ischemia.

CT scan: This imaging test uses x-rays to create detailed images of the intestines and blood vessels.

Angiography: This test involves injecting a contrast dye into the blood vessels and taking x-rays to visualize blood flow.

Ultrasound: This imaging test uses sound waves to create images of the intestines and blood vessels [5].

Treatment

The treatment of intestinal ischemia depends on the severity and duration of the condition.

Surgery: This is the most common treatment for acute intestinal

Correspondence to: Merina Rose, Department of Gastroenterology and Human Nutrition, Monash University Clayton Campus, Melbourne, Australia, E-mail: merinar@gmail.com

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ischemia. The surgeon will remove any blood clots or damaged tissue and restore blood flow to the intestines.

Medications: The doctor may prescribe medications to dissolve blood clots or prevent further clotting.

Angioplasty and stenting: This is a minimally invasive procedure that involves inserting a small balloon into the narrowed artery and inflating it to widen the artery. A stent may also be placed to keep the artery open.

Bypass surgery: This is a more invasive procedure that involves rerouting blood flow around the narrowed artery using a graft [6].

Prevention

Preventing intestinal ischemia involves managing the risk factors that contribute to the development of the condition. Some of the preventive measures include the following;

Manage underlying medical conditions such as high blood pressure, diabetes, and heart disease can increase the risk of developing intestinal ischemia.

Quit smoking: Smoking can increase the risk of developing atherosclerosis, which can lead to chronic intestinal ischemia. Quitting smoking can help reduce the risk of developing the condition.

Maintaining a healthy weight: Being overweight or obese can increase the risk of developing atherosclerosis and other medical conditions that can lead to intestinal ischemia.

Stay hydrated: Dehydration can reduce blood flow to the intestines, which can increase the risk of developing non-occlusive mesenteric ischemia. Drinking plenty of water and staying hydrated can help reduce the risk.

Regular exercise can help maintain a healthy weight, reduce blood pressure, and improve overall cardiovascular health.

A healthy diet that is rich in fruits, vegetables, whole grains, and lean protein can help reduce the risk of developing atherosclerosis and other medical conditions that can lead to intestinal ischemia.

Stress can increase blood pressure and reduce blood flow to the intestines, which can increase the risk of developing non-occlusive mesenteric ischemia. Managing stress through relaxation techniques, exercise, and other stress-reducing activities can help reduce the risk [7].

CONCLUSION

Intestinal ischemia is a serious and potentially life-threatening condition that requires prompt diagnosis and treatment. The diagnosis of intestinal ischemia requires a high degree of suspicion, and prompt intervention is essential to prevent further damage to the intestines. The treatment involves surgery, angioplasty, or thrombolytic therapy. Supportive care, including fluid resuscitation, electrolyte replacement, and pain management is also important.

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