

Preoperative Management of Gastric Ileus: Challenges and Best Practices

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INTRODUCTION

Gastric ileus is a medical condition that occurs when there is a partial or complete obstruction in the gastrointestinal tract, specifically in the stomach. It is a common problem that can affect people of all ages, but is most commonly seen in elderly and critically ill patients. The obstruction in the stomach can occur due to various reasons, such as a blockage caused by a tumor, inflammation, or scar tissue. The symptoms of gastric ileus can include abdominal distension, nausea, vomiting, and a lack of bowel movements. If left untreated, gastric ileus can cause serious complications such as aspiration pneumonia, dehydration, and electrolyte imbalances. Early diagnosis and appropriate management are crucial in preventing complications and improving outcomes for patients with gastric ileus [1].

There are several risk factors that can increase the likelihood of developing gastric ileus. Some of these risk factors include: Abdominal surgery: Previous abdominal surgery, especially if it involved the stomach or intestines, can increase the risk of developing gastric ileus. Medications: Certain medications, such as opioids and anticholinergics, can slow down the movement of the digestive system and increase the risk of developing gastric ileus. Medical conditions: Certain medical conditions such as diabetes, hypothyroidism, and Parkinson's disease can increase the risk of developing gastric ileus. Infections: Infections in the abdomen, such as peritonitis, can cause inflammation and scarring that can lead to gastric ileus. Trauma: Abdominal trauma, such as a car accident or a fall, can cause damage to the digestive system and increase the risk of developing

gastric ileus. Critically ill patients: Critically ill patients, especially those who require mechanical ventilation, are at a higher risk of developing gastric ileus. It is important to identify and manage these risk factors to prevent the development of gastric ileus and its complications [2].

The treatment of gastric ileus depends on the underlying cause and the severity of the condition. In mild cases, conservative management may be sufficient, while in severe cases, surgery may be necessary. Here are some treatment options for gastric ileus: Conservative management: In mild cases of gastric ileus, conservative management may be effective. This includes withholding oral intake, inserting a nasogastric tube to decompress the stomach, and administering fluids and electrolytes intravenously to prevent dehydration. Medications: Medications such as prokinetic agents (which help to stimulate the movement of the digestive system), laxatives, and antiemetics (which help to control nausea and vomiting) may be used in some cases. Endoscopy: In some cases, endoscopic procedures may be used to remove obstructions or relieve pressure in the stomach. Surgery: In severe cases of gastric ileus, surgery may be necessary to remove the obstruction or repair any damage to the digestive system. Surgery may also be required in cases of intestinal ischemia or necrosis, where the blood supply to the intestine is compromised. Nutritional support: Patients with gastric ileus may require enteral or parenteral nutrition to ensure that they are receiving adequate nutrition while their digestive system recovers. The choice of treatment depends on the severity of the condition, the underlying cause, and the overall health of the patient. It is important to work closely with a healthcare provider to determine the most appropriate treatment plan for each individual case [3].

Diagnosing gastric ileus involves a combination of clinical assessment and diagnostic tests. Here are some of the common diagnostic methods used to diagnose gastric ileus: Physical examination: A healthcare provider will perform a physical examination to assess the patient's symptoms, such as abdominal distension, tenderness, and bowel sounds. Imaging tests: Imaging tests such as

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abdominal X-rays, computed tomography (CT) scans, and ultrasound scans can be used to visualize the digestive system and identify any obstructions or abnormalities. Blood tests: Blood tests can be used to assess the patient's electrolyte levels, as well as to check for signs of infection or inflammation. Gastric emptying study: A gastric emptying study involves the ingestion of a meal containing a small amount of radioactive material. The rate at which the stomach empties can be measured using a special camera, which can help to diagnose gastric ileus. Endoscopy: Endoscopy can be used to visualize the digestive system and identify any obstructions or abnormalities. It is important to diagnose gastric ileus early to prevent complications and improve outcomes. A healthcare provider will determine the most appropriate diagnostic method based on the patient's symptoms and medical history [4].

Preventing gastric ileus involves managing the risk factors that can contribute to the condition. Here are some strategies that can help to prevent gastric ileus: Manage underlying medical conditions: Many medical conditions, such as diabetes, Parkinson's disease, and certain gastrointestinal disorders, can increase the risk of gastric ileus. Managing these conditions through medication and lifestyle changes can help to prevent the development of gastric ileus. Avoid surgery when possible: Surgery is a common cause of gastric ileus, so avoiding unnecessary surgery or minimizing the extent of surgery can help to reduce the risk of developing the condition. Use prokinetic agents: Prokinetic agents, which help to stimulate the movement of the digestive system, can be used to prevent the development of gastric ileus in patients at high risk, such as those who have undergone abdominal surgery. Early mobilization: Early mobilization after surgery or hospitalization can help to prevent the development of gastric ileus. Walking or other forms of physical activity can help to stimulate the digestive system and prevent the accumulation of gas and fluids in the stomach. Proper nutrition and hydration: Adequate nutrition and hydration are important for maintaining the proper function of the digestive system. Patients who are at high risk of developing gastric ileus may benefit from enteral or parenteral nutrition to ensure that they are receiving adequate nutrition while their digestive system recovers.

It is important to work closely with a healthcare provider to develop a personalized prevention plan based on individual risk factors and medical history [5].

CONCLUSION

Gastric ileus is a condition characterized by the partial or complete obstruction of the stomach or small intestine, leading to the accumulation of gas and fluids in the digestive system. It can cause a range of symptoms, from mild discomfort to life-threatening complications. Risk factors for gastric ileus include surgery, certain medical conditions, and the use of certain medications. Treatment options depend on the severity of the condition and may include conservative measures such as fasting and medication, or more invasive procedures such as surgery or endoscopy. Diagnosis of gastric ileus involves a combination of clinical assessment and diagnostic tests such as imaging, blood tests, gastric emptying study, and endoscopy. Prevention of gastric ileus involves managing the risk factors, such as managing underlying medical conditions, avoiding unnecessary surgery, and promoting early mobilization and proper nutrition and hydration. It is important to seek prompt medical attention if you are experiencing symptoms of gastric ileus to prevent complications and improve outcomes. A healthcare provider can work with you to develop a personalized treatment and prevention plan based on your individual needs and risk factors.

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