Bay Leaf Phytobezoar: A Not So Uncommon Cause of Gastrointestinal Obstruction

Jonathan Sorelle, M.D., Pradeesh M. George, BS, Vincent W Vanek, MD FACS, Marc S. Saunders, DO, FACS • Department of Surgery, St. Elizabeth Health Center, Youngstown, Ohio

Introduction

Phytobezoars are an uncommon cause of bowel obstruction for people eating western diet. The differential diagnosis for bowel obstruction generally includes adhesions, a variety of hernias, and volvulus of the small bowel. Phytobezoars in western diets are composed mainly of herbal leaves. Bay leaves (Laurus nobilis), rosemary, and parsley are some common examples. Tylophora arborea is responsible for symptoms of bowel obstruction in tropical areas. The differential diagnosis usually does not include the ingestion of bay leaves, as this is not a common complication of their use. This paper will present two cases of bay leaf ingestion in which patients experienced clinical symptoms of bowel obstruction requiring emergent diagnosis. In both cases, presentation was delayed.

Case Report

Case 1

The patient was a 60-year-old male status post Roux-en-Y gastric bypass for morbid obesity. He had been asymptomatic until day 9 of hospitalization, when he was found to have abdominal distention, nausea, and vomiting. Physical examination revealed the patient to be afebrile but with abdominal distention. Laboratory evaluation revealed leukocytosis at 12,500 cells/µL with an absolute neutrophil count of 8,000 cells/µL. CT of the abdomen showed a transition point at the ileocecal valve. The patient’s abdomen became progressively more distended and the patient became nauseous. The patient’s vital signs included a heart rate of 100 bpm, blood pressure of 100/60 mmHg, respiratory rate of 18 bpm, and oxygen saturation of 98% on room air. The patient was taken to the operating room for exploratory laparotomy. A laparotomy was performed. Once the peritoneum was entered, the small bowel was run from the ileum-cecal junction to the ligament of Trietz. At the terminal ileum, a dense loop of bowel was noticed to be adherent to the posterior abdominal wall. The bowel was found decompressed. There was, however, an area of stricture approximately 6 cm from the ileocecal junction. The surgeon placed the loop of bowel into the abdominal cavity and resected it. The patient was taken to the recovery room and placed on nil per os. The patient was able to tolerate clear liquids on day 13. The patient was discharged on day 15. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction.

Case 2

The patient is a 65-year-old male with a history of chronic obstructive pulmonary disease and end stage renal disease. He presented to the emergency room with abdominal pain and distention. Physical examination revealed the patient to be afebrile but with abdominal distention. Laboratory evaluation revealed leukocytosis at 12,500 cells/µL with an absolute neutrophil count of 8,000 cells/µL. CT of the abdomen showed a transition point at the ileocecal valve. The patient’s abdomen became progressively more distended and the patient became nauseous. The patient’s vital signs included a heart rate of 100 bpm, blood pressure of 100/60 mmHg, respiratory rate of 18 bpm, and oxygen saturation of 98% on room air. The patient was taken to the operating room for exploratory laparotomy. The patient was placed on nasogastric tube. The patient was able to tolerate clear liquids on day 13. The patient was discharged on day 15. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction. The patient continued to do well with NG tube placement, with no complaints of nausea, vomiting, or abdominal pain. Vital signs were stable, and he was euthermic, with a WBC count of 6.5. Abdominal distention was treated with NG tube placement and placement to low intermittent suction.

Discussion

Mechanical small-bowel obstruction (SBO) can be classified by cause into 3 main groups: (1) intraluminal (e.g., foreign bodies, bezoars, and food bolus), (2) obstruction resulting from lesions in the bowel wall (e.g., volvulus, prolapse, and intussusception), and (3) other causes. These categories are not mutually exclusive, and many etiologies of bowel obstruction share overlapping characteristics. Surgeons should be vigilant for less common causes of SBO, such as phytobezoar. Foreign body causing bowel obstruction is uncommon. We assert that bay leaves should also be considered as a source of bowel obstruction. Greater public awareness regarding bay leaves will prompt gastronomes to remove bay leaves prior to serving cuisine.