Small Bowel Obstruction Secondary to a Large Phytobezoar

April 30, 2007
By Jinichi Tokeshi, MD [1]

Phytobezoars commonly develop in the distal small bowel, where the lumen is narrow. Prevalence is higher after partial gastric resection.

An 83-year-old woman was hospitalized for generalized abdominal pain with nausea and bilious emesis of 2 days' duration. She had no diarrhea, constipation, melena, hematochezia, hematemesis, or dysphagia. She had undergone subtotal gastrectomy with Billroth I anastomosis for a duodenal ulcer 40 years earlier.

The patient's abdomen was nondistended; bowel sounds were audible. No masses were palpable. Vital signs and laboratory findings were normal. A plain-film radiograph of the abdomen revealed a distended small bowel with air fluid levels. No free air was noted. A nasogastric tube was placed, and 1200 mL of yellow gastric fluid was removed. Intravenous pantoprazole therapy was started.

An abdominal CT scan with contrast revealed a distended stomach and proximal small bowel loops suggestive of small bowel obstruction. After 6 days of supportive care with no improvement, laparoscopic-assisted abdominal exploration was performed. A brown-green, nodular, 5.0 × 3.5 × 3.5-cm, 29.9-g mass was removed from the distal small bowel; cross sections revealed an orange, dark-tan granular tissue (A). Microscopic examination of the mass showed compacted aggregates of debris and outlines of vegetable-type material (B). No epithelial or mesenchymal lesions were present.

The patient's postoperative course was complicated by ileus, which resolved within a week. She was then weaned off total parenteral nutrition and discharged.

Phytobezoars commonly develop in the distal small bowel, where the lumen is narrow, as a result of consumption of fruits and vegetables that contain indigestible material (eg, persimmons, oranges, broccoli). 1-3 This patient's symptoms were consistent with obstruction caused by a phytobezoar. She also had risk factors for phytobezoar formation, including frequent consumption of vegetables and a history of peptic ulcers.

The partial gastrectomy with Billroth I anastomosis was probably another predisposing factor. In a study of 34 patients with phytobezoar, more than half had previous gastric surgery. 3 Partial gastric resection is associated with reduced acid secretion and altered pyloric function, both of which result in incomplete digestion and movement of unusually large boluses of food material into the small intestine. In this case, a large aggregate of poorly digested vegetable material may have lodged in the distal portion of the patient's small intestine and subsequently caused an obstruction.

Because phytobezoars may be more prevalent among patients who have undergone partial gastric resection, these patients should be advised to chew their food thoroughly and be aware of foods that may lead to phytobezoar formation.

References: REFERENCES:

**Source URL:**
http://www.physicianspractice.com/gastrointestinal-disorders/small-bowel-obstruction-secondary-large-phytobezoar

**Links:**