Small Bowel Phytobezoar due to Poor Mastication

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A healthy 50 year old woman presented with abdominal pain, vomiting and leukocytosis with a typical picture of small bowel obstruction on plain films and no previous abdominal operations. An abdominal computed tomography was performed, demonstrating a typical picture of small bowel obstruction due to a phytobezoar in the small intestine [Figure 1]. Additional bezoars were identified in the stomach [Figure 2], and multiple small bezoars were located distally in the small bowel [Figure 3]. Repeated anamnesis revealed a large amount of meat in the diet and poor mastication due to the lack of teeth. The patient underwent explorative laporotomy, "on-table" gastroscopy for removal of the gastric bezoar and then milking of bezoars through the small bowel to the cecum. The post-surgical recovery was uneventful.

Phytobezoar is a rare cause of small bowel obstruction. It is a concretion of poorly digested food generally formed in the stomach. Gastric bezoars can become fragmented and the fragments can migrate and become impacted in the small bowel, causing obstruction [1]. Previous gastric surgery and vagotomy are the main risk factors that account for 75% of the cases [2]. Other causes include eating of persimmons, a vegetarian diet, and poor mastication.

CT has become a useful method in establishing the presence and cause of a small bowel obstruction [3], especially in cases with equivocal clinical and plain film findings. A well-defined ovoid intraluminal mass with a mottled gas pattern located on the site of the small bowel obstruction is the typical appearance of phytobezoar on CT [4]. The CT scan should also be evaluated for a residual gastric and duodenal phytobezoars as it can cause recurrent small bowel obstruction after the surgery.

The treatment of choice of phytobezoar is surgery with fragmentation and milking of the bezoar into the cecum [5]. Enterotomy or intestinal resection are reserved for cases where this method is not an option.

References

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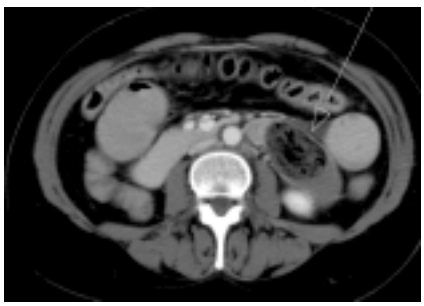

Figure 1. Axial slice of enhanced abdominal CT showing well-defined ovoid intraluminal mass with mottled gas pattern at the site of obstruction in the small bowel (arrow)

Figure 2. Axial slice of enhanced abdominal CT showing another similar mass (bezoar) in the stomach (arrow)

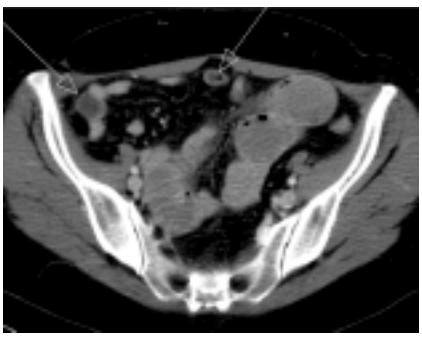

Figure 3. Axial slice of enhanced abdominal CT showing additional bezoars in the small bowel (arrows)