Trichobezoar

a rare cause of acute bowel obstruction

Mohamed S. Al-Skaini, MBBS, A.F.CHI(PhD), Mohamed I. Seleem, MBBCCh, FRCSI

ABSTRACT

A surgically successfully treated case of (2.8kg) Trichobezoar presenting with severe epigastric pain, vomiting, associated with anemia and dark stool of one days duration. Complicated on admission by an acute intestinal obstruction. There has been no report of such a case from Saudi Arabia up to the present time. The presenting symptoms and signs, and management strategies are discussed.

Keywords: Trichobezoar, anemia, provisional diagnosis, management, complication.


The term ‘bezoar’ is derived from the Arabic word ‘badzehr’ or the Persian word ‘padzehr’ meaning protection against poisons (antidote). Trichobezoars are uncommon foreign bodies usually composed mainly of hair and food particles found impacted and forming a cast in the stomach or small intestine. Other, less common forms of bezoars that have been reported include those of fruit and vegetable fibers (phytobezoar), antacids, pitch, animal fat, shellac, and latex. The first report of trichobezoar was published in 1779 by Bandamant. Successful surgical removal was first carried out in 1883 by Schonborn. Stelzner is believed to have been the first to record a correct preoperative diagnosis of a trichobezoar in 1896.

Case Report. A twenty year old lady, presented to the emergency room with a history of severe epigastric pain, vomiting of one weeks duration, associated with anemia and dark stool for one days duration. Her past medical history was uneventful.

Physical examination findings. She had pallor, was anxious, tachycardia of pulse rate 120/min. Blood pressure 130/80 mmHg. Systemic examination revealed a non tender mass in the epigastrium and left upper quadrant of the abdomen. There was neither hepatomegally nor lymphadenopathy. Her hemoglobin was 6.6 g/l, white blood cell count 6.500/l, Platelet 144000/l. She was admitted under the care of the medical team as a case of anemia with splenomegally for investigation. On the same day, the patient underwent an ultrasound of the abdomen which showed some diffuse splenic enlargement and normal liver and kidneys. Next day the patient underwent barium meal which revealed grossly dilated stomach reaching into the pelvis and huge intra-gastric mass, a -J- shaped cast of the stomach with a fine reticular network pattern presumably ball of hair (trichobezoar). Then she underwent upper gastrointestinal tract endoscopy which revealed gastric granulomatous polyps bleeding on touch and a huge ball of hair.

From the Department of Surgery, Armed Forces Hospitals Southern Region, Khamis Mushayt, Kingdom of Saudi Arabia.

Received 29th January 2000. Accepted for publication in final form 25th March 2000.

Address correspondence and reprint request to: Dr. M. Al-Skaini, Consultant General Surgery and Endoscopy, Department of Surgery, Armed Forces Hospitals Southern Region, PO Box 101, Khamis Mushayt, Kingdom of Saudi Arabia. Tel/Fax No. +966 (7) 2350121.
The patient was referred to the surgeon, and at the same time the patient developed an acute intestinal obstruction. The patient's condition was corrected by blood transfusion and she underwent laparotomy, a 2.8 Kg large hair ball extending from the gastric fundus up to the duodenum was removed via a longitudinal gastrotomy incision and a small daughter hair ball (which had migrated downward into the small bowel and induced acute intestinal obstruction) was removed via entrotomy (Figure 1). The patient had an uneventful post operative recovery and was seen by the Psychiatrist. She was discharged home 14 days later with follow up in the surgical and psychiatric outpatient clinics.

Discussion. Single pieces of hair cannot be moved distally by peristaltic activity and diet, in particular, pasty food favors the formation of hair balls in the stomach.\(^1,5\) Trichobezoars consist of a mass of ingested hair combined with other fibres, and occur in young women (90%), including some with mental disorders and a history of trichophagia.\(^1\) Portions of the trichobezoar may separate from the gastric mass, and as 'daughter balls' migrate distally, and obstruct the small bowel.\(^6\) Strands of hair may extend ally long strands have been observed to descend from the stomach as far as the transverse colon (Rapunzel syndrome).\(^7\) The initial signs and symptoms of bezoar simulate those of an abdominal tumor and include a firm epigastric mass (87%), tenderness to palpation, vomiting, and weight loss.\(^1\) The diagnosis often rests on the suspicion of the alert physician since most patients will not volunteer to give a history of swallowing hair. Ultrasonographic diagnosis of such cases may be relatively specific as in our presenting case.\(^6\) Barium meal examination is usually the initial study when the history and physical finding do not suggest the diagnosis. More recently, bezoars have also been diagnosed easily with endoscopy.\(^9\) Surgical treatment is the only option in complicated trichobezoar cases, as in our case. The use of metoclopramide may reduce the incidence of recurrence.\(^10\)

Complications associated with trichobezoar are frequent.\(^11\) The perforation of the small bowel is uncommon. About 10% of patients with trichobezoar have a gastric ulcer, due to increased acid secretion, which may perforate. Those associated with perforation carry a risk of high mortality rate probably due to severe peritonitis. Transient pancreatitis is believed to be induced by the trichobezoar tail because of irritation of the ampulla of Vater.\(^12\)

In conclusion, although the trichobezoar is a rare condition, we are presenting our case to consider such a diagnosis in mental disorder patients with upper epigastrium mass associated with vomiting and weight loss. We believed that endoscopy is the best investigation to rule out the suspicion. Treatment should focus on prevention of recurrence, since elimination of the mass will not alter the condition contributing to their formation and Psychiatric assistance should be sought.

References