CASE REPORT

A CASE REPORT OF TRICHOBEZOARS

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ABSTRACT: Bezoars are masses of solidified organic or non biological material commonly found in the stomach and small bowel. There are many types of them such as: phytobezoar, trichobezoars, lactobezoars and food boluses. Phytobezoars are the commonest among these. Stomach is the commonest site for bezoar formation. Bezoars can result in obstruction, irritation and damage to the gastric wall and malnutrition. Trichobezoars are associated with trichotillomania a disorder characterized by failure to resist impulse to pull out ones hair. Although bezoars are not rare, multiple giant bezoars which totally fill the stomach lumen and have extension to the small intestine (Rapunzel syndrome) are very rare. This is case report of young girl who had a history of mass per abdomen and evaluated by ultrasound abdomen and CT abdomen. The diagnosis was confirmed by endoscopy and bezoar was removed by gastrostomy.

KEY WORDS: bezoars, trochobezoars, trochotilloma

INTRODUCTION: The term bezoar refers to accumulation/impaction of foreign material in the gastrointestinal tract and is known to occur in man and animals for centuries. Trichobezoars were first described by Baudomant in 1779 [1, 2], consisting of a compact mass of hair, occupying the gastric cavity to a various extent. The term "bezoar" is thought to be derived from the Arabic word for antidote – "bazahr" or "badzehr", because stones obtained from the stomach or intestines of animals were thought to have medicinal properties [2-4]. The earliest references on the subject "was made by Sushruta in India which dates back to 12th century.

CASE REPORT: A 16yrs old female resident of Bellary who came with history of mass per abdomen and abdominal discomfort since 1 month. There was no history of vomiting and bowel irregularity. On abdominal examination non tender palpable mass over the epigastric, left hypochondrium and umbilical region. Laboratory investigations are normal. Ultrasound abdomen shows large ill-defined intraperitoneal hyperechoic lesion in periumbilical region. CT abdomen shows grossly distended stomach with large heterogeneous lesion and mottled gas pattern finding in keeping with gastric bezoar (trichobezoars). Endoscopic findings show large hairballs in the stomach.

OPERATIVE FINDINGS: Under GA laparotomy and gastrostomy done. Identification and removal of three hair balls from stomach done. Patient tolerated the procedure well.

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Fig-1: CT abdomen with trichobezoars in stomach

Fig-2: loss of hair posterior view

Fig-3: loss of hair anterior view

Fig-4: Intra op trichobezoars in stomach

Fig-5: stomach incision

Fig-6: complete removal of trichobezoars

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Fig-7: closure of stomach after removal of trichobezoars

Fig-8: trichobezoars

DISCUSSION: Historically the kings of ancient Persia were often targets of poisoning. It was therefore their practice to place a calculus from the intestinal tract of the Persian mountain goat at the bottom of their wine cups, attributing magical protective power to it and believing that the porous structure absorbed poisons. It was called "Padzahr", the Persian word for anti poisoning. The derived word bezoar is still used to designate large, unpleasant gastrointestinal concretions. The first description of a post-mortem human bezoar was given by Swain in 1854. 9

Trichobezoars occur almost exclusively in females and 80% of these cases have a psychiatric disorder. Apart from obstruction, trichobezoars may also cause ulceration with hematemesis, perforation or peritonitis.¹⁰

An abdominal radiograph may show a prominent gastric outline with an intragastric mass, outlined by gas in the distended stomach. On Gastrograffin / barium studies a mobile intraluminal filling defect is seen in contrast filled stomach not attached to any of the walls. Ultrasound has been shown to be effective in diagnosing bezoars in upto 88% of cases. A "clean" acoustic shadow, which represents a solid mass, can be visualized.

Computed tomography (CT) best describes its size, configuration and location, and differentiates trichobezoars from neoplasm. The characteristic appearance of a trichobezoar on CT is an non-homogeneous, non-enhancing mass within the lumen of the stomach or bowel. In endoscopy, trichobezoars are often found to have a hard, concrete-like appearance and enzymatic oxidation of hair gives them a darkened colour.

Treatment may include endoscopic removal but there is risk of bowel perforation, so this should be restricted to small trichobezoar only.¹² However, cases of long trichobezoar removal with endoscopic procedures has been documented.¹ Psychiatric treatment is necessary as the patient is likely to develop trichobezoar again if the habit of hair ingestion is not given up.

The treatment aims at the complete removal of bezoars from the gastrointestinal tract. Small bezoars may be removed by endoscopy, associated or not with laser and shock wave (lithotripsy); 15 phytobezoars may be eradicated with enzymes, fragmentation, or medications. The treatment must begin as non-invasive, but surgery is the best prognosis in cases of severe clinical status that do not respond to conservative handling, as well as in cases presenting complications.¹⁶

CONCLUSION: Diagnosis of bezoars needs high index of suspicion and it should be considered in the differential diagnosis of bloating in young females. Trichobezoars are usually seen in healthy

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patients with normal digestive system but with psychiatric problems such as trichophagia, trichotillomania and/or mental retardation. Determining the cause of trichobezoars in patients without a known psychiatric history is very difficult but it seems that most of the times there are some degrees of behavioral disturbance linked with them. So in such cases psychiatric evaluations is strongly recommended.

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