

CASE REPORT

Type-2 Diabetes Mellitus with Gastric Trichobezoar

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Trichobezoars are gastric concretions composed of hair, usually found in long haired girls or young women [1]. Definite correlation exists between bezoars and psychotic illness and disorders affecting gut motility especially gastroparesis diabetecorum [2, 3, 4]. Most bezoars have come to the attention of surgeons when the bezoar passed from the stomach to the small intestine and caused obstruction. Most of the reported cases have been treated by operative removal of the bezoar [5]. We are presenting a patient of Type-2 diabetes complicated by background retinopathy, sensorimotor neuropathy and endogenous depression with gastric trichobezoar.

Case Report

A 40-year female was admitted in the department of Endocrinology with diagnosis of uncontrolled Type-2 diabetes mellitus, with a mass in the epigastrium. Patient had been detected diabetic three years back and was taking oral hypoglycemic agents over these years without symptomatic improvement. She used to prefer isolation and avoid gatherings. She mentioned that she plucked hair whenever she felt hungry as she hesitated in demanding food from her in-laws. Intermittantly she had been experiencing post-prandial fullness over last six months.

Examination revealed middle-aged lady, expressionless, average built with BMI of 20, unremarkable physical examination except of mild pallor. Systemic examination revealed normal respiratory and cardiovascular examination. Central nervous system examination revealed absence of ankle jerks while fundus examination revealed changes of background retinopathy. Abdominal examination revealed apparent fullness in upper abdomen on inspection, on palpation oval hard mass 15 x 10 cms was felt in epigastric region. This mass was extending to left hypochondrium, non tender, dull on percussion with slight mobility in vertical direction. Psychiatric assessment by a psychiatrist reported patient had normal abstractional capability with positive history of delusional thinking and ideas of reference labeled as "post-traumatic stress disorder."

Investigations revealed anaemia with Hb 9.4 g percent, hypochromic microcytic peripheral blood

film. Normal serum urea, creatinine, bilirubin, proteins (Albumin, globulin), alkaline phosphatase, 24 hour urinary protein, X-ray chest and 12 lead basal electrocardiography. Ultrasonography was reported normal. Esophagogastroduodenoscopy revealed large trichobezoar in stomach, few hair were plucked out endoscopically, duodenum was normal. Patient underwent laprotomy with gastrostomy after controlling blood sugar with intermediate acting insulin 45U/day in two divided doses. Operation findings revealed tufts of hair forming a big trichobezoar measuring 10 x 6 cms with shape of stomach. This was removed (Fig 1). Post-operative period remained uneventful. Patient has been followed in the diabetic clinic since then and is receiving antidepressant treatment from psychiatrist.

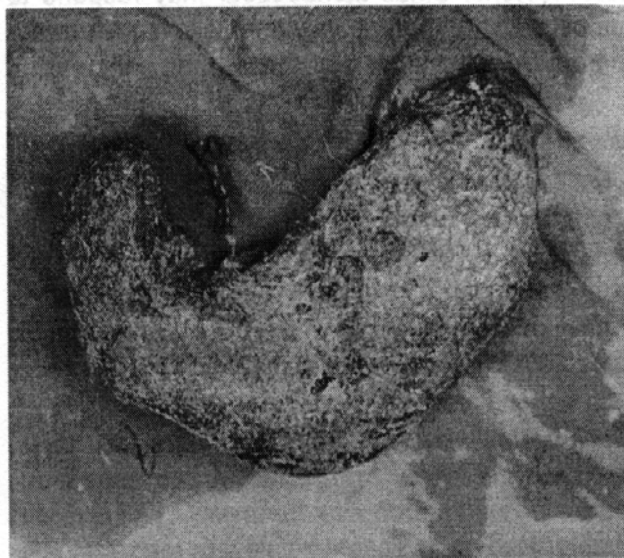


Fig 1 : Post operative specimen of gastric trichobezoar.

Discussion

Term bezoar comes from the Arabian "badzehr" or Persian "padzah" both of which mean antidote. Bezoar stone obtained from the goat's stomach was believed to have medicinal properties as early as the 12th century BC [1]. Gastric bezoars are foreign bodies that generally increase in size by accretion and are composed of food and or hair [1]. Trichobezoars are gastric concretions composed of hair and fiber and are usually found in long haired girls or young women with varying degrees of emotional disturbances. [1, 2].

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Patients of diabetes mellitus have been shown to develop trichobezoar as a result of polyphagia resulting in inadvertent selection of non-digestible and non-nutritional foods [3]. Bezoar formations have been attributed to delayed gastric emptying of larger non-prandial antral hypomotility have been shown to occur in such patients [4, 6]. Gastric phytobezoars have been reported in patients with peptic esophageal ulceration during cimetidine therapy [7]. Bezoar formation have also been reported after gastric resection (Billorth) [8].

Symptoms in such patients include pain from gastric ulceration, anorexia, constipation or diarrhoea, fatigue, sitophobia, gastric discomfort and fullness from outlet obstruction. Evaluation includes a barium meal roentgenography. Ultrasonographic appearance of trichobezoar have been described as well, which can be used for diagnosis [9]. However, endoscopy will confirm the nature of bezoar may respond to endoscopic fragmentation, vigorous lavage, enzyme therapy or combination of these approaches [1]. In patients with diabetes mellitus besides correcting hyperglycemia, treatment with prokinetic drugs have been used for gastroparesis [4, 6].

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