

A Case Report on Large Bowel Obstruction in Case of Geophagia

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Abstract: *Geophagy is an eating disorder defined by an irresistible urge to ingest soil or clay. We reported a female patient who presented with abdominal pain and distension. Thorough history taking, physical examination, and investigations, the patient was found to have features of intestinal obstruction. As mechanical obstruction occur. Surgery was done by opening the abdomen and sigmoid colon with extraction of hard stool. The diagnosis of a geophagia type of pica.*

Keywords: GI obstruction, Constipation, Bhutdo Eating.

1. Introduction

Geophagy is a eating disorder of eating behavior defined by irresistible urge to ingest soil or clay, its prevalence in children is unknown, it is often associated with mental retardation. It can be the cause of serious surgical complications. It is a form of Pica, Pica is the eating or craving of things that are not food. The ingested or craved substance may be biological, natural or manmade.

According to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM - 5), pica as a standalone eating disorder must persist for more than one month at an age when eating such objects is considered developmentally inappropriate, not part of culturally sanctioned practice, and sufficiently severe to warrant clinical attention. it can cause surgical emergencies to address intestinal obstructions, as well as more subtle symptoms such as nutritional deficiencies and parasitosis. Pica has been linked to other mental disorders. Stressors such as psychological trauma, maternal deprivation, family issues, parental neglect, pregnancy, and a disorganized family structure are risk factors for pica. Pica is most commonly seen in pregnant women, small children, and people who may have developmental disabilities such as autism. greater risk exists of gastrointestinal obstruction or

tearing in the stomach. Another risk of eating soil is the ingestion of animal feces and accompanying parasites.

Pica may take different forms depending on the substance consumed; these include pagophagia (eating ice), trichophagia (eating hair), lithophagia (eating stones), geophagia (eating soil), and metallophagia (eating metals).

2. Case Report

A 38y/female patient history of abdominal pain and distension and failure to pass stool/flatus for 2 days. patient had history of geophagia in form of taking bhutado (indian clay) for cultural reason. On examination, the patient was initially vitally stable with features of gastrointestinal obstruction and abdomen istended, generalized tenderness and guarding found and per rectal examination is empty.

On Investigations

On admission patient blood investigation finding Anaemia (hb 6.0), and platelet count (77000). Ultrasound (Abdo+pelvis) revealed excessively gaseous abdomen minimal ascites at scan with b/l renal concretions.

Xray:



Figure 1: AXR suggestive of Distended content loaded large bowel

CECT s/o mild thickening of wall of sigmoid colon
Proximal colon measures approx 56mm, small bowel loops normal in present study large (99*97*82) mm size of uterine

fibroid, mild hepatomegaly, mild splenomegaly, mild free fluid in peritoneal cavity present.

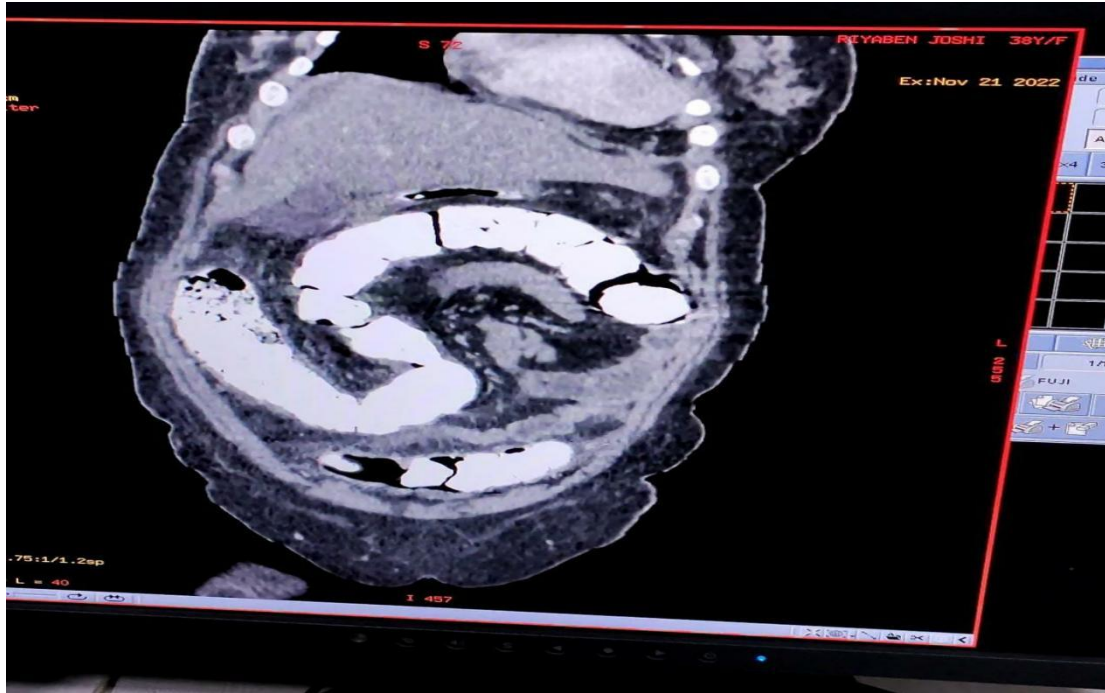


Figure 2: CECT S/o mild thickening of wall of sigmoid colon

Management:

Patient was admitted and conservative management started with insertion of Ryle's tube and catheter and keep patient NBM. patient not improved with conservative management. We planned operative management.

Per operative Finding:

Exploratory laparotomy with midline incision, on opening of abdomen stomach, small bowel, liver, Gall bladder, spleen

found normal. There were hard stool with clay palpated in caecum, ascending colon transverse colon, descending colon and half of sigmoid colon.

Enterotomy was done at sigmoid colon 10cm proximal to the rectosigmoid junction, all stool with clay was extracted by milking through enterotomy. bowel wash given and enterotomy closed.

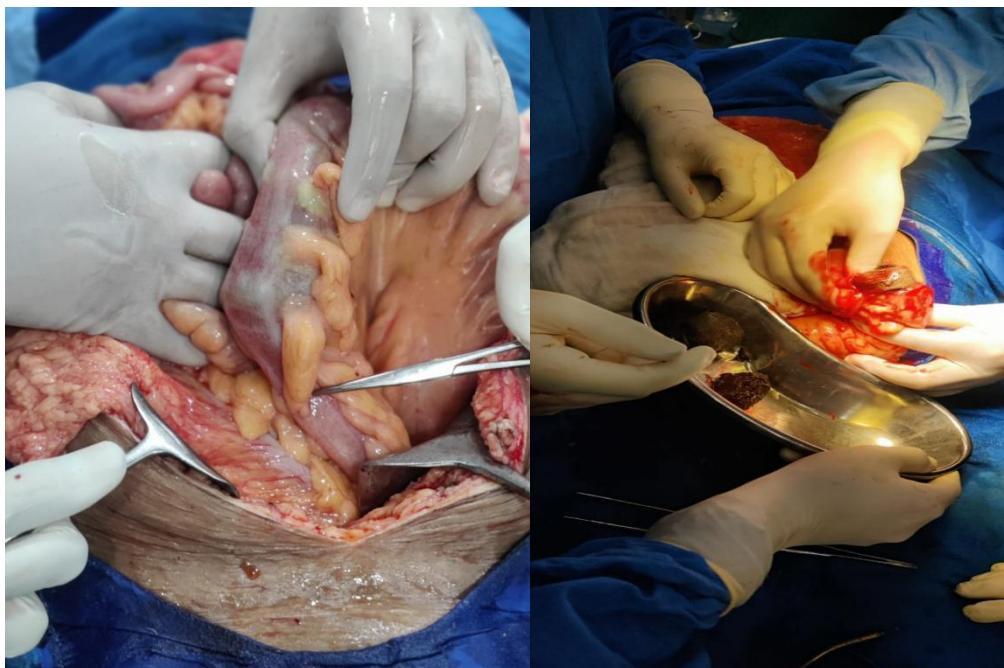




Figure 3, 4, 5: Intraoperative pictures of Enterotomy and extraction of impacted hard stool pellets

Post operative events:

Pod 1 Patient continue on T piece mode of ventilation with vitally hypertensive (155/96mmhg) and Drain output was 800 cc serohemorrhagic. Pod2 Patient is on cpapmov with fio2 50% and patient was vitally stable. Pod3 Patient is on cpapmov with further deterioration of respiration patient had tachypnea, tachycardia, hypotension. Pod4 Patient is on A/CMV mov with general condition is poor. Pod5 Patient had altered sensorium further vitally deteriorates.

Pod6 Despite of all resuscitative measures patient couldnot survived and declared death at sicu.

3. Discussion

Geophagia is an eating disorder defined by an irresistible urge to ingest soil or clay.

The prevalence of a practice that was as stigmatized as geophagy is hardly appreciable. We do not have an epidemiological study in the general population, but only estimates in pregnant women, young children or patients with psychiatric disorders.

This disorder may be associated with mental retardation which was reported in many studies, including ours where psychomotor retardation is found. Clinically, abdominal pain and vomiting were the most frequently encountered signs, the clinical examination in our patient found a distended and tender abdomen, digital rectal examination found a fingerstall soiled with sand The abdominal plain X - ray in our patient found a significant individualization of a granite - like content throughout the digestive tract which reflects the massive amount ingested by our patient. The amount of sand ingested on average is much smaller than that found in our patient. Radiological signs can easily be missed if they are not specifically sought. The chances of detection of soil in the stomach are higher if early pictures are made.

In the small intestine the sand is much less visible because of its dilution by the large volume of intestinal fluid. Optimal opacification occurs in the colon because of the high absorption of water at this level. Different non - invasive treatments were reported in the literature based primarily on manual extraction, enemas, and laxatives that give good results in general, but failure should suggest surgical treatment. The ileocecal topography may be related to the existence of an ileocecal valve which narrows this

area, and impede colic progression. Ulceration and necrosis may still occur, thus life threatening the patient and indicating emergency surgery. Conservative treatment is possible, but surgery remains the prerogative of complicated forms.

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