

Atypical Jejunal Perforation due to Cotton Threads Bezoar in a Postpartum Woman Associated with Pica

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Dear Sir,

We are reporting here a rare case of perforation peritonitis in 25 year postpartum woman due to a bezoar in the jejunum. Patient had history of eating threads from quilt in her pregnancy days. Exploratory laparotomy revealed atypical perforation at mesenteric border of jejunum with protrusion of threads. She was managed by removal of whole thread bezoar and standard primary repair of perforation [Table/Fig-1]. There were no concomitant bezoars in the stomach or duodenum and proximal jejunum ascertain intraoperatively by palpation and postoperative upper gastrointestinal endoscopic studies. In this article, we also discuss about possible aetiology of this case "abnormal eating behaviour in pregnancy" due to pica.

Bezoars are compact masses formed of various indigestible foreign or intrinsic substances found in the gastrointestinal tract. Bezoars are classified in subgroups according to composition: 1) Phytobezoar is a particular type of bezoar composed of indigestible cellulose, tannin & lignin derived from ingested vegetables & fruits; 2) Diospyrobezoar is type of phytobezoar formed from unripe persimmons; 3) Pharmacobezoar (composed of undigested medications); 4) Trichobezoar (composed of hair); 5) Lactobezoar (reported only in neonatal period & consisting of ingested milk). Causes of bezoar includes the presence of indigestible material in the lumen usually diagnosed in mentally retarded or psychiatric patients with gastric dysmotility (including previous surgery like vagotomy and partial gastrectomy etc.) and poor mastication, vegetarian diet, diabetic gastroparesis, hypothyroidism [1].

In our case report, patient was suffering from abnormal eating behaviour in pregnancy due to pica. The aetiology of pica is complex which includes environmental, nutritional, socioeconomic,

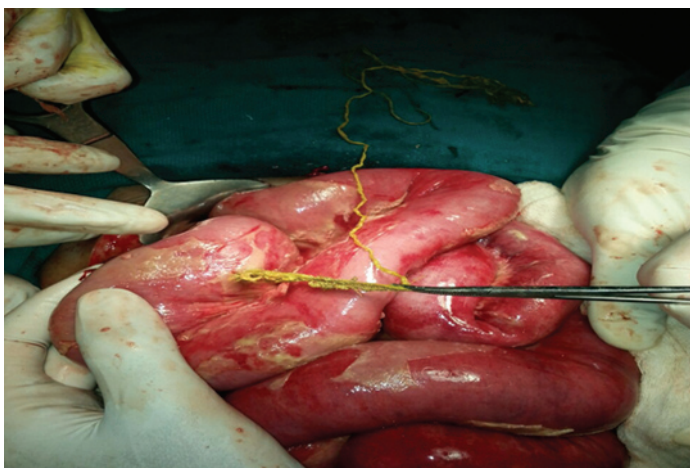
physiologic, cultural and psychiatric factors. Theories concerning possible nutritional deficiencies as a cause of pica are abundant, with many researchers including vitamin and mineral deficiency in the list of suggested risk factors [2]. One of the theory behind increased hunger in the pregnancy is; during pregnancy women are resistant to "Leptin", an endocrine growth factor which is responsible for reduces appetite and stimulates metabolism by interacting with receptors at the "appetite centre" of the hypothalamus [3]. Without Leptin, multiple hunger stimulating orexigenic pathways are left unopposed. This results in decreased immunoreactivity by one of the most potent orexigenic agent "Neuropeptide Y" [4]. During pregnancy 75% of women also have changes in sense perception in the form of "increased sensitivity to odours" and "a metallic taste in the mouth".

Certain items possess a strong sensory attraction for women who practice pica. There was a connection between liking the taste and enjoying its texture in the mouth [2,5]. Same occur in our case in which pregnant woman like taste of quilt threads and practiced pica throughout pregnancy. It was seen that whole bunch of cotton thread bezoar was retrieved [Table/Fig-2].

It has been hypothesized that these altered gustatory and olfactory perception thresholds are caused by a change of neuronal activity within the pregnant women brain due to adjacent uterine and gustatory neurons may be interacting with one another [6].

What made our case unique was the postpartum diagnosis of young female without a psychiatric history, practice pica, have small bowel cotton thread bezoar without parent stomach bezoar and atypical perforation at mesenteric end of jejunum which is very rare.

Bezoars are a bizarre medical problem, though the incidence is low. It has been our effort to point out the psychological or other aetiological manifestation of bezoar, like our case one should



[Table/Fig-1]: Shows atypical jejunal perforation at mesenteric end with protrusion of cotton threads.



[Table/Fig-2]: Shows whole bunch of cotton thread bezoar.

aware about pica practice in pregnancy, which is often missed and undertreated, that may result in bezoar and perforation which is life threatening to patient and her child.

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