



Case Report

PICA OF ADULT ONSET PRESENTING AS SURGICAL EMERGENCY

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Abstract

Pica is a worldwide problem that has no barriers of age, race, gender or geography. Pica may be benign or it may have life threatening consequences. We report here a case of 28-year-old male, electrician apparently psychologically sound got admitted with complaints of persistent pain in upper abdomen and vomiting with history of ingestion of dinner fork and tooth brush. Laparotomy was done to remove the foreign bodies and later referred to psychiatry department where he was diagnosed as an adult onset pica due to schizophrenia. Pica in elderly age group is relatively uncommon, and it rarely has an adult onset.

Keywords: Adult onset, ingestion of different items, pica.

Introduction

Pica is defined by the American Psychiatric Association as persistent eating of non-nutritive substances that is inappropriate to developmental level, occurs outside culturally sanctioned practice and, if observed during the course of another mental disorder, is sufficiently severe to warrant independent attention and must have occurred for at least one month.¹ The term pica comes from the latin word meaning magpie, a bird which shows an indiscriminate preference for foods and non-foods.

This culturally and developmentally inappropriate condition is commonly associated with iron and zinc deficiency and is seen mostly in children with a strong family history. In adults, it is commonly associated with pregnancy and may also occur in context to other illness such as autism, mental retardation and schizophrenia.² Although foreign body ingestion is common and a benign event, serious complications occasionally require medical or surgical intervention. Successful approaches to treatment are behavioral treatment and treatment of the underlying cause like psychosis.² Timely recognition of the condition and appropriate treatment can avoid the complications.

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Case Report

A 28-year-old man presented with upper abdominal pain and vomiting for last 10 days. He was unmarried, smoker, non alcoholic and apparently looked psychologically sound. On examination he was moderately pale and dehydrated. Abdominal examination revealed a tender lump in the epigastrium. Plain X-ray abdomen in erect posture showing a radio opaque shadow looks like a dinner fork in the epigastric region (Figure-1). On query, he gave history of feeling difficulty in deglutition during a meal about 30 days back and for relief of which he introduced a dinner fork into the digestive tract but accidentally it was ingested. On laparotomy anterior wall of the stomach was found to be penetrated by dinner fork which

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stuck the deeper aspect of anterior abdominal wall (Figure -2)



Fig1: Dinner fork in the stomach

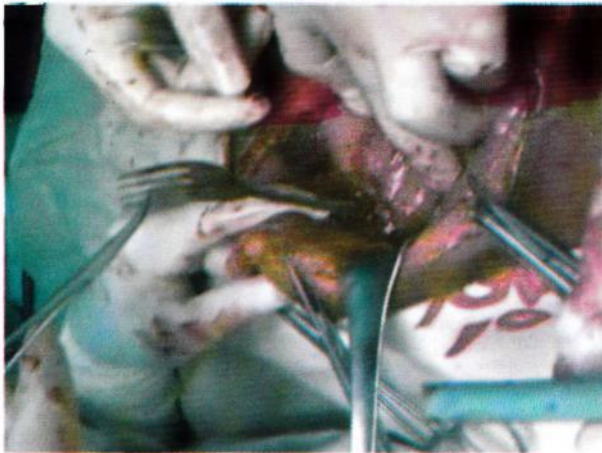


Fig2: Anterior gastrotomy- Dinner fork in the stomach is visualized

Anterior gastrotomy was done. Total 11 different objects were recovered from lumen of stomach (Dinner fork-1, Tooth brush -2, Ball point pen with cap-1, Ball point pen without cap-3, Two taka Bangladeshi currency-1, Sachet of medicine-1, Covering of jarda box-1) (Figure-3).



Fig 3: Different items extracted from stomach.

During postoperative period on query the patient could not tell anything about different items in his stomach except about the brushes which he introduced as if this will help in passing the dinner fork. Postoperative recovery of the patient was unremarkable. He was referred to psychiatry department. He was found to be suffering from schizophrenia and pica. The patient was advised to continue antipsychotic drugs along with psychiatric counseling and regular follow-ups in surgery OPD, and to report immediately in case of any abdominal complaints.

Discussion

Pica is the craving or eating of items that are not food. There are many reasons why people eat dirt or other non-food items. Quite often, pica is only seen and recognized when it results in complications that lead someone to obtain medical attention.³ The eating of non-food substances may interfere with the body's consumption of normal nutritional food. Ingesting toxic substances can cause poisoning. Complications of pica can include: malnutrition, intestinal obstruction, intestinal infections or parasites from soil, anemia, mercury poisoning, liver and kidney damage, constipation and abdominal problems.^{3,4} In this case the patient is of low socioeconomic status apparently psychologically normal with no past history of psychiatric illness presented to us with complications, and pica due to schizophrenia is diagnosed after consultation with psychiatrist. Eighty percent of ingested foreign bodies that reach the stomach will pass uneventfully through the gastrointestinal tract. Ten percent to 20% will require nonoperative intervention and 1% or less (mainly long sharp metal objects) will require surgery because of obstruction, perforation or hemorrhage.⁵ Pre-existing intestinal disease such as ileal stricture due to Crohn's disease or tuberculosis increases the risks of such complications.⁵ Mortality following foreign body ingestion has been extremely low. Impaction, perforation or obstruction occurs at areas of physiologic narrowing or acute angulations such as the cricopharyngeal sphincter or ileocaecal valve.⁶ Once a foreign body, even sharp pointed ones, has entered the stomach, it will most likely pass through the alimentary tract uneventfully.⁷ For blunt objects, observations as outpatients may well be done if they have entered the stomach. Most objects are passed within four to six days though some may take even four weeks.⁷ Blunt objects that fail to pass the stomach within three to four weeks or remain static beyond the stomach for more than one week, need to be removed.⁷ Because perforations are seen in around 35% of patients ingesting sharp pointed

metallic objects, animal or fish bones, toothpicks, needles etc. attempts to carefully retrieve them by endoscope should be made even if they have passed into the stomach.⁶ Otherwise they should be followed with daily radiographs or hand held metal detectors. Surgical intervention should be done if they fail to progress for three consecutive days.⁷ While the patients are under observations, they should report immediately in case of abdominal pain, vomiting, fever, hematemesis or melena. Non pharmacological (supportive psychotherapy, cognitive behavioral therapy) and pharmacologic psychiatric management as indicated should be essential parts of treatment protocol.

Conclusion:

Pica is a common problem in children than in adults. However, an interesting fact in this case is the age of the patient which is quite unusual for pica to occur. This perhaps necessitates further research in dealing with the epidemiology and other aspects of this quite rare but interesting disease entity.

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