



A Case report on multiple foreign bodies ingested in an adult man

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ABSTRACT

A 20 year old schizophrenic male referred from primary health centre (PHC) with unrelenting abdominal pain, vomiting and constipation. Similar history given by parents in the past and after careful and meticulous work-up, patient was taken up for an emergency exploratory laparotomy. About 37 different metallic, plastic and paper foreign bodies were extracted from the small and large bowel. This case emphasizes the importance of close, long term surveillance and follow-up in at-risk psychiatric patients and the possibility of bizarre findings in such scenarios.

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INTRODUCTION

The majority of accidental foreign body ingestions occur in children (80%) (1). Deliberate and recurrent foreign body ingestion in adults is described more commonly among the psychiatric patients with auditory hallucinations as the most common inciting factor, in criminals and drug smugglers to hide the drugs and very rarely witnessed in a suicidal attempt(1)(2). About 90% pass spontaneously and only 1% require surgical removal for the same. (2)(3,4) Various foreign bodies are ingested ranging from plastic, metal, papers, animal bones, coins, etc(5). And similarly can have varied presentations ranging from obstruction, perforation, ulceration, bleeding or fistula formation.(6,7)(8)(9) It is rightly believed that this discussion of foreign body ingestion is past only the surgical subspecialties and now deserve a rightful multidisciplinary approach on all fronts of psychiatric evaluation as well. (10)

Case

We present a case of a 26 year old schizophrenic patient who presented to our ER with symptoms suggestive of acute intestinal obstruction since 3 days. The relatives gave a history of a chronic foreign body ingestion on and off since 3 year, during which time it would pass out in stools. The patient was referred from a PHC in view of the same. The patient was non-compliant with the anti-psychiatric medications.

On examination patient was conscious. His pulse was feeble, tachycardiac 110/min with low blood pressure (80/50mmHg). He was immediately resuscitated with crystalloids. Nasogastric tube and Foley's catheter insertion was done in the ER. His hemogram revealed a low haemoglobin count and other parameters were unremarkable. After stabilisation plain radiograph was taken. A quick CAT scan was done.



FIG 1- A RADIOGRAPH AND CAT SCAN IMAGES WITH 3D RECONSTRUCTION, SHOWING THE MULTIPLE FOREIGN BODIES AT IC JUNCTION, MIDDLE PART OF THE ABDOMEN AND IN THE AREA OF SPLENIC FLEXURE.

The patient was taken for an emergency exploratory laparotomy. A midline incision was taken and bowel was traced from the stomach distally, multiple foreign bodies could be felt at the Ic junction, at the

transverse colon and at the splenic flexure. The duodenum was found to be stuck to the splenic flexure of the colon with a fistula formation between them with an impacted plastic pen about 7 cms long.

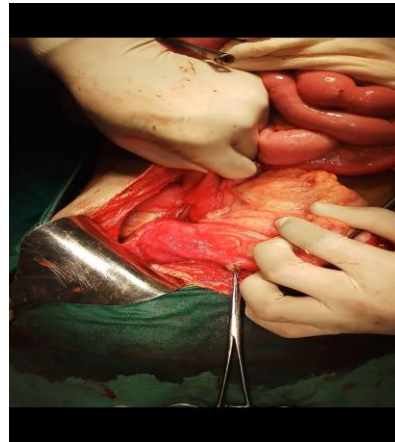


FIG 2- SHOWING THE COMMUNICATION OF THE DUODENUM WITH THE SPLENIC FLEXURE OF THE COLON WITH AN IMPACTED PLASTIC PEN.(ARROW)

Three enterotomies performed to deliver various foreign bodies which included plastic wrappers, papers, pens, metallic needle, stones, etc. Distal to the splenic flexure the colon was found to be collapsed thus consistent with the picture of intestinal obstruction.



FIG 3- ANOTHER FOREIGN BODY BEING TAKEN OUT THROUGH THE ILEUM, WITH AN ENTEROTOMY PROXIMAL TO THE IC JUNCTION.



FIG 4- THE VARIOUS FOREIGN BODIES THAT WERE TAKEN OUT AT THE END OF THE PROCEDURE

Due to the contamination, and a fairly large enterotomy that had to be made in the transverse colon and also to safeguard the IC junction an ileostomy was made through the same enterotomy used for taking out the foreign bodies, about 20 cms proximal to the IC junction. The other enterotomy was closed in three layers using Polydioxane(PDS) 3-0. The duodenal rent due to the fistula was also closed using PDS 3-0 after putting a patch of omentum upon it. A thorough wash was given and a drain was kept, abdomen was closed in layers. Post operatively the patient was shifted to an ICU for observation.

Post operatively clear liquids were started on day 3 and the patient had a good stoma output. His haemoglobin improved over time and he was started on full diet from day 5. The further recovery was unremarkable.

Discussion

Multiple foreign bodies in the bowel can present as an emergency. There is normally a history of chronic ingestion in the psychiatric patients. Single and small foreign often do not pose any threat as they pass through the bowel without causing any symptoms. In children ingestion of such things like coins, pen caps, etc is very common(1,2,4). This can be often managed conservatively with radiographs taken over days and with a watchful expectancy(11). Animal bones can be sharp and can cause symptoms in edentulous old and alcoholic patients who hurriedly eat these without chewing. In many cases foreign bodies distal to the duodenum can be successfully

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taken out through colonoscopy and in cases of these being proximal to the ligament of Treitz the same can be done via upper GI endoscopy.(11)(12)

However, when patient presents with a history of multiple foreign body ingestion causing acute symptoms it becomes imperative to timely intervene. There have been previously published literature stating similar instances of multiple foreign body ingestion in schizophrenic patients and death in some cases. (13–15). Cognitive and other supportive therapies have looked promising in this dimension of management(16–18) and regular follow up with intermittent radiological studies should be performed to prevent an extreme scenario as described above.

Conclusion

This patient followed up after 6 weeks for stoma closure. However loss to follow-up after initial set of investigations and has not followed-up in the psychiatric division as well.

This case thus highlights the fact that psychiatric patients who have a tendency to eat the foreign bodies can present in emergency with symptoms of obstruction and perforation. A timely laparotomy is important to prevent further deterioration and to save recurrent need of endoscopic procedures, especially in patients who are unwilling to follow up and who stay in remote areas.

A multidisciplinary follow-up routine at both divisions of the medical specialties with intermittent radiological scans can prevent such a dire situation in the near future in high-risk patients.

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