

CASE REPORT

SMALL BOWEL PERFORATIONS DUE TO DELIBERATE INGESTION OF INJURIOUS FOREIGN BODIES—A PERSONAL EXPERIENCE

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Ingestion of foreign bodies is not an uncommon problem in our society. The patients usually ingest different types of foreign bodies either accidentally or deliberately. Rare in children but adults are not uncommonly affected and are either psychiatric patients or ingest foreign bodies accidentally. Life threatening complications may occur at times due to ingestion of sharp and pointed objects. An interesting case of ingestion of multiple injurious foreign bodies presenting with multiple small intestinal perforations is presented with review of literature.

Key Words: Gastro-intestinal perforations, foreign bodies, injurious objects.

INTRODUCTION

The ingestion of foreign bodies is a global problem, affecting a major population and may be associated with a significant morbidity and mortality.¹ The commonest being the food products such as fish bones¹ and more frequently tooth picks are also reported to be ingested.² Although rare in conscious and stable adults, its fairly a common problem in psychiatric patients.³ The morbidity and outcome depends upon the size, shape and nature of the ingested material. The consequences may range from un-noticed passage per rectum to severe peritonitis following bowel perforation and there may be acute bowel obstruction. The perforation of stomach, duodenum or large bowel tends to have a delayed and innocuous presentation compared to the perforation of jejunum and ileum.⁴

CASE REPORT

A 24-year-old, married lady with three children, presented with severe abdominal pain, distension of abdomen, vomiting and constipation of three days duration. The abdominal examination revealed a severely tender abdomen with huge distension. Routine investigations revealed 12 G/dl haemoglobin, disturbed serum electrolytes with low potassium and sodium. The x-ray abdomen on erect posture revealed multiple air-fluid levels and there were gas filled distended bowel loops in supine film. In addition to these, there were multiple shadows of foreign bodies of different shapes and sizes mainly in the pelvic area. The position of all the shadows changed on subsequent x-rays (Figure-1). Per rectal examination was done and rectum was found empty. Ultrasound examination revealed distended gas and fluid filled bowel loops but there was no indication of foreign bodies in the bowel lumen. The patient strongly denied ingestion of any thing. The whole situation was explained to the husband of the patient and a written consent obtained for laparotomy. In the mean time intravenous fluids,

inject able antibiotics and nasogastric decompression started. The fluid and electrolytes corrected before proceeding for laparotomy. On laparotomy the whole abdominal cavity was full of faeces and there were seven perforations in the terminal ileum, about a foot from ileo-caecal junction through which most of the objects were delivered (Figure-2). Sharp objects like hairpins, a locket, two battery cells, metallic chains, an ascaris lumbricoid, two paper rolls and a roll of sewing thread were recovered (Figure-3). The whole segment was resected followed by end-to-end anastomosis. The postoperative recovery was smooth and the patient was discharged on 10th post-operative day.



Figure-1: Distended bowel loops with radio-opaque shadows.

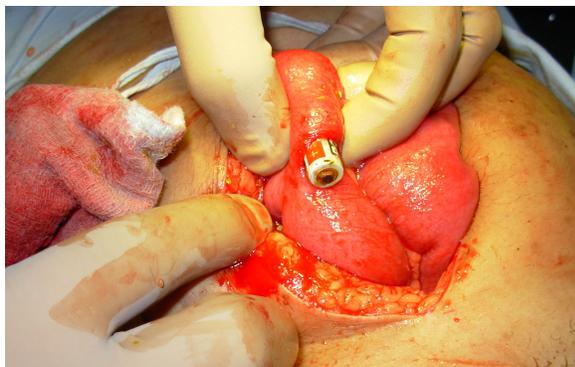


Figure-2: A battery cell is withdrawn from the perforated bowel.

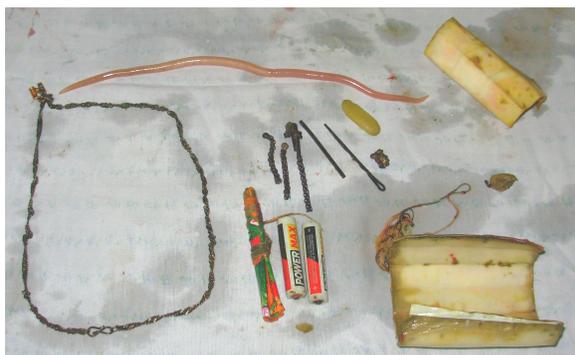


Figure-3: Different foreign bodies recovered

DISCUSSION

Deliberate ingestion of foreign bodies constitutes a relatively rare problem in mentally healthy adults. However, it is common among children and the commonest ingested foreign body is a coin. The objects with regular and smooth contour may pass easily through GIT without causing any harmful effects. On the contrary sharp and pointed objects may lead to perforation of the bowel with consequent peritonitis and sometimes acute bowel obstruction. Karamarkovic AR *et al*⁴ have reported hepatic abscess secondary to gastric perforation and migration of a rosemary twig into liver. Stomach and duodenum are the commonest site of perforation by the ingested foreign bodies. This is contrary to our report where most of the perforations were found in

the terminal ileum, a finding consistent with the reports of Pinero Madrona A *et al* and Nagaraj HS.^{5,6,7} Patients who ingest deliberately are usually psychiatric patients, drug abusers, alcoholics, and mentally retarded people⁸ and need a psychiatric evaluation.⁹ Review of literature reveals a number of such reports in our own country indicating the gravity of the problem.¹⁰⁻¹¹ Plain x-ray abdomen is the most accurate diagnostic tool for metallic objects. A detailed history about dietary habits, mental state and personal habits of the patient should be explored in addition to other investigations as needed to reach to a conclusive pre-operative diagnosis.

CONCLUSION

Foreign body ingestion is fairly common in adults with psychological disturbances. An early diagnosis and prompt surgical intervention may prevent life-threatening outcome.

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