

## CASE REPORTS

# A CASE REPORT OF INGESTION OF MULTIPLE BEAD MAGNETS PRESENTING WITH MULTIPLE INTESTINAL PERFORATIONS

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### ABSTRACT

We present a case where ingestion of multiple bead magnets caused multiple perforations of small bowel and required surgical intervention. Pressure necrosis of intervening loops of small intestine led to tiny perforations at multiple sites without contamination of the abdomen. All of those magnets were retrieved by performing enterotomy and resection & anastomosis done at few sites. If unattended or missed out they can even lead to death.

### ARTICLE HISTORY

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### KEYWORDS

magnet, perforation, enterotomy.

### Introduction

Ingestion of magnets has become common in current generation kids due to their inclusion in toys and being colourful. Whenever they are either single they pass out naturally and when multiple usually they are removed via endoscopy.<sup>1</sup> Here we present a case where multiple bead magnets ingestion caused perforations of small bowel and required surgical intervention.

### Case Report

A 7-year-old otherwise healthy, developmentally normal female had complaint of abdominal pain for 10 days, severe in nature, not relieved with medication. Repeated ultra-sonogram examinations were normal. Hence, child was referred from peripheral health centre to our hospital. Erect Abdominal Radiography revealed more than 15 adherent magnetic beads in small bowel (Figure 1). On probing, child gave a history of swallowing coloured round magnet beads while playing for past few weeks. She had normal stool pattern.

**Figure 1.** Adherent magnetic beads in small bowel.



On examination, vital signs were normal. On palpation, abdomen was tender child was guarding.. Because all beads could not be retrieved endoscopically, she was taken to surgery. Bowel loops were all found to be adherent. Pressure necrosis of intervening loops of small intestine was found causing perforation at multiple sites but without contamination of the abdomen. All of those magnets were retrieved by performing enterotomy and resection & anastomosis (Figure 2). Following procedure an abdominal drain was placed. Postoperative period was uneventful. Oral feeds escalated gradually after 72 hours and drain removed. Child was doing well on follow-up.

**Figure 2.** Magnets were retrieved by performing enterotomy and resection & anastomosis.



### Discussion

Ingestion of multiple magnets causes them to attract with forces of up to 1300G, compressing intervening bowel and can lead to subsequent bowel perforation, fistulization.<sup>1,2</sup> If unattended or missed out they can even lead to death. Of latest, few cases such have been reported worldwide.<sup>2</sup> Attractive toys are being prepared by using colourful bead magnets and

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children usually have the habit of exploring things by keeping them in mouth. Being small in size and round in shape these bead magnets tend to get slipped inside the mouth when children play with them by putting in mouth.

### **Conclusion**

Improvement in public awareness about the risk of these toys and education of clinical practitioners about early identification of such scenarios is key to prevent such incidents. Moreover, advocacy with government leaders and social media propaganda is crucial for removing or banning the importing and marketing these hazardous toys from retail shelves.

### **Compliance with Ethical Standards**

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**Conflict of Interest:** None

### **References**

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