CASE REPORT OPEN ACCESS

Multiple Singing Magnet Ingestion leading to Partial Gastric Outlet Obstruction

Imran Hashim¹, Bilal Mirza¹, Arsalan Raza Wasti¹, Muhammad Saleem¹

ABSTRACT

Ingestion of multiple magnets can cause serious complications in children. A 6-year-old boy presented with clinical features of partial gastric outlet obstruction secondary to ingestion of multiple magnets. On exploration, six magnets were retrieved from stomach. The patient is doing fine thereafter.

Key words

Magnet ingestion, Gastric outlet obstruction, Child.

INTRODUCTION:

Amongst foreign bodies (FB) ingested in children magnets are of special consideration. The ovoid shape magnets are very attractive to the children as they produce a typical sound when tossed together in air, so named as singing magnets. Due to their smooth and slippery structure, and ovoid shape these magnets can easily pass into stomach if children ingest them accidentally. This may result in variety of complications. Herein a child who ingested multiple singing magnets leading to gastric outlet obstruction (GOO) is reported.

CASE REPORT:

A six year old boy referred with recurrent episodes of abdominal pain and non-bilious vomiting for the last two and half months. The child could tolerate few meals but often vomit out most of the ingested food. For this complaint multiple visits were made to different physicians and he received various medications and at times intravenous fluids. On admission, the patient was vitally stable but slightly dehydrated. Abdominal examination revealed fullness and mild tenderness especially in the left upper quadrant. All laboratory investigations were within normal limits. Contrast meal study and CT scan abdomen were done in peripheral hospitals. These revealed metallic jumbled up FBs in mid abdomen (Fig-I). Patient was initially referred to gastroenterology department for endoscopic removal



Fig I: Metallic FB in the mid abdomen on radiograph.



Fige II: Multiple magnets being retrieved from the stomach. Inset shows 6 singing magnets.

Correspondence:

Imran Hashim ^{1*}
Department of Paediatric Surgery
The Children Hospital &
The Institute of Child Health, Lahore
E mail: deardrimi2002@yahoo.com

¹ Department of Paediatric Surgery

but it was not attempted thus plan was made to perform laparotomy. At operation six singing magnets were retrieved from the stomach after performing gastrotomy (Fig. II). During removal, one magnet was slipped and crossed the pylorus which was milked from duodenum back to the stomach and retrieved. Postoperative course was uneventful.

DISCUSSION:

In our case all the magnets were jumbled-up in the stomach. This resulted in partial obstruction of stomach at pyloric canal. All magnets were stuck together thus none of them were present beyond stomach. Surgical intervention is required in case of multiple magnets ingestion according to algorithm devised by European and North American Societies of Pediatric Gastroenterology, Hepatology, and Nutrition.⁴ When multiple magnets are in the esophagus or the stomach these can be removed endoscopically.⁵ Our gastroenterology team was of the view that these magnets have entered the small bowel. Multiple magnets ingestion may result in various complications. Thus early intervention is recommended.

REFERENCES:

- Yuce O, Acikgoz M, Guzel A, Comba A, Gunaydin M, Kalayci A, et al. Metallic foreign body ingestion during childhood. J Acad Em Med. 2015;14:79-82.
- Soomro S, Mughal SA. Singing magnets ingestion: A rare cause of intestinal obstruction in Children. J Coll Physicians Surg Pak. 2014;24:688-9.
- Mirza MB, Bux N, Talat N, Saleem M. Multiple singing magnet ingestion leading to pressure necrosis of the small bowel. J Indian Assoc Pediatr Surg. 2015;20:90-1.
- Hussain SZ, Bousvaros A, Gilger M, Mamula P, Gupta S, Kramer R, et al. Management of ingested magnets in children. J Pediatr Gastroenterol Nutr. 2012;55:239-42.
- Lee SK, Beck NS, Kim HH. Mischievous magnets: unexpected health azard in children. J Pediatr Surg. 1996;31:1694-5.

Author's Contributions:

Imran Hashim: Literature search, drafting of the article.

Bilal Mirza: Conception and design of study and manuscript writing.

Arsaln Raza Wasti: Conception of idea.

Muhammad Saleem: Critical revision and interpretation for final

submission.

Conflict of Interest:

The authors declare that they have no conflict of interest.

Source of Funding:

None

How to cite this article:

Hashim I, Mirza B, Wasti AR, Saleem M. Multiple singing magnet ingestion leading to partial gastric outlet obstruction. J Surg Pakistan. 2016;21(2):79-80. Doi:http://dx.doi.org/-10.21699/jsp.21.2.10