

## An indigestion or a viral gastritis, or not?

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### Case report

An 18 mth old boy was sent to the Emergency Room of the Jessa Hospital (Hasselt, Belgium) because of persistent vomiting. The clinical examination was without particularities, except for a runny nose. The diagnosis of indigestion or (viral) gastritis was made. Patient was sent home. He was represented at the ER five days later. He stopped vomiting for 3 consecutive days after his first hospital visit, but started to vomit again the last 2 days, the last night even two times with bilious vomiting. His appetite was decreased since one week. The infant was not comfortable during abdominal palpation. This finding led to the decision for further investigations.

An abdominal ultrasound showed air superposition in the epi- and mesogastrium. There were no signs of intussusception. An abdominal X-ray was performed (fig 1).



Fig. 1. — Abdominal X-ray. Dilated small intestinal loops. Free air under right diaphragm. Corpus alienum, presumably magnets in mesogastrium.



Fig. 2. — Laparoscopy. Clotted small intestinal loops due to the magnet bullets at + 25 cm of Treitz angle. Multiple perforation sites. Magnets are still in the lumen.

*What is your diagnosis?*

### Answer & discussion

The abdominal X-ray showed a corpus alienum, presumably magnets, in the mesogastrium and free air under the right diaphragm (fig. 1). An abdominal CT-scan could not visualise whether the magnets were situated in- or outside the intestinal lumen. At laparoscopy, clotted small intestinal loops with multiple perforation sites were detected as well as a purulent peritonitis in the left fossa iliaca (fig. 2). Magnets were removed. Perforations were sutured. Postoperatively augmentin was given. Patient recovered completely.

Neodymium supermagnets were introduced in the market in 2009. Because of their super-strength, incredible performance and resistance to demagnetisation, they can be made in many shapes and sizes, even as small as 1 mm diameter. Accidental ingestion by young children can be unwitnessed and symptoms can be nonspecific especially in the case of small magnets, making it a diagnostic challenge. If more than one magnet is swallowed, they

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can attract each other through the intestinal wall, get stuck and pinch the digestive tract causing major and sometimes life-threatening intestinal perforation (1). Endoscopical or surgical removal can be performed, based on location and complications (2,3).

## References

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