

Letter to the Editor

Trichobezoar Related Colon Perforation in a 2-year-old Child

Dear Editor,

Foreign body ingestion is encountered frequently in pediatric emergency departments. Once in the stomach, ninety-five percent of all ingested substances pass without difficulty through other parts of gastrointestinal tract. Risk of perforation is below one percent.¹ Objects able to pass to duodenum usually get out easily from gastrointestinal system.²

A two and a half-year-old girl was admitted to the emergency department with poor overall health and vomiting. When questioned, parents told that she had no stool passage within the last 24 hours and undergone barium X-ray esophagography for dysphagia a month ago. On physical exam, diffusely distended abdomen and diminished bowel sounds were noted. During follow-ups, abdominal tenderness and distension continued. Therefore, oral intake of the patient was stopped and a nasogastric tube was placed for free gastric drainage. Laboratory evaluation revealed a white blood cell count of 3,900/mm³, haematocrit of 27% and a platelet count of 226,000/mm³. Blood gas analysis showed the following values pH: 7.22, PaCO₂: 6.7 kPa (50.5 mmHg), bicarbonate 17.6 mEq/L. X-ray investigations revealed an increased density spreading over a 3*4 cm part, predominant in right upper and lower quadrants (Figure 1a). On abdominal ultrasound, 33*27 mm sized abscess was suspected.

On abdominal CT, a localised mass lesion filled with bowel content was detected in the upper quadrant, progressing to lower parts (Figure 1b). Diagnostic laparotomy was employed. Upon laparotomy, perforation and distention in the ascending colon was spotted. Whole abdomen was filled with bowel material caused by the leakage from the perforation site. Cecum and distal part of the ascending colon was intussuscepted to the perforation site. Perforated area was surgically repaired. Resections from 10 cm long ileum piece and hepatic flexure site was sent to pathology. During the intubation, a foreign material in the nose was noticed. Bronchoscopy was performed for

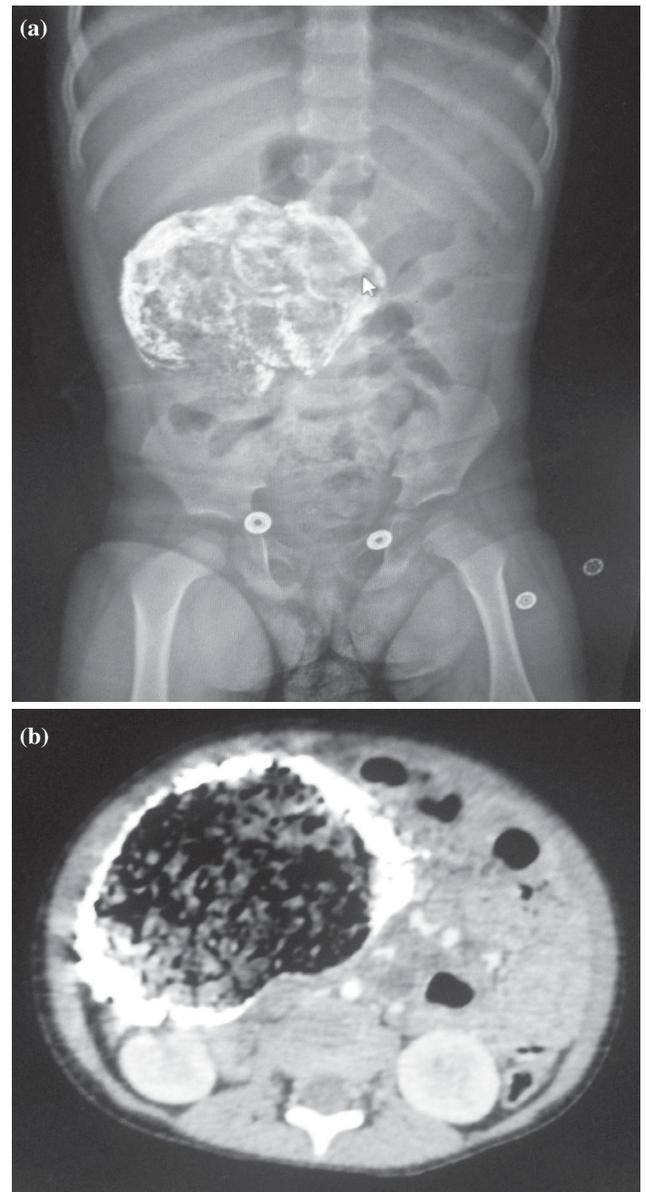


Figure 1 (a) A-P chest X-rays. (b) Computed tomography scans.

diagnostic purposes and bronchi were aspirated. No foreign body was detected in the two main and distal bronchi. Condensed pus in the bronchi was aspirated. After surgery, patient was closely monitored in pediatric intensive care unit. Broad spectrum antibiotics were administered. Pathology report showed numerous foreign bodies including hair, feathers and unidentified materials.

Bezoars are defined as exogenously taken indigestible material located in stomach and intestines. Trichobezoars are usually composed of patients' own hair.³ Foreign body ingestion incidence is higher between the ages of 6 months and 6 years and our patient is in the higher risk group.⁴ The ingested materials are mostly opaque, such as coins, pins, hooked needles, batteries and toy parts. Also food ingestions may occur, although food related complications are seen rarely in children.⁵ In our case, history of barium-enema X-ray for swallowing dysfunction was present.

In present case, ingestion of multiple foreign bodies gave rise to obstruction and perforation of ascending colon. Dispersed fecal contents triggered the development of secondary peritonitis. In conclusion, foreign body ingestion should be kept in mind in children admitted to emergency department with toxic appearance, vomiting and signs of gastrointestinal obstruction.

References

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