

## Coincidentally detected button battery ingestion in patient presenting with intestinal obstruction

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### Introduction

Foreign body ingestions still can lead to life-threatening clinical charts and challenging symptoms [1]. Button battery ingestion is one of the foreign body carried higher morbidity and mortality for children [2]. Button battery ingestion may result in serious complications due to three type injury (chemical caustic injury, electrical current effect, and pressure on tissue) in gastrointestinal tract [3]. Many injures are reported such as esophagotracheal fistula, aortoesophageal fistula, pneumomediastinum, obstruction or perforation of intestines and gastrointestinal fistula [1,2].

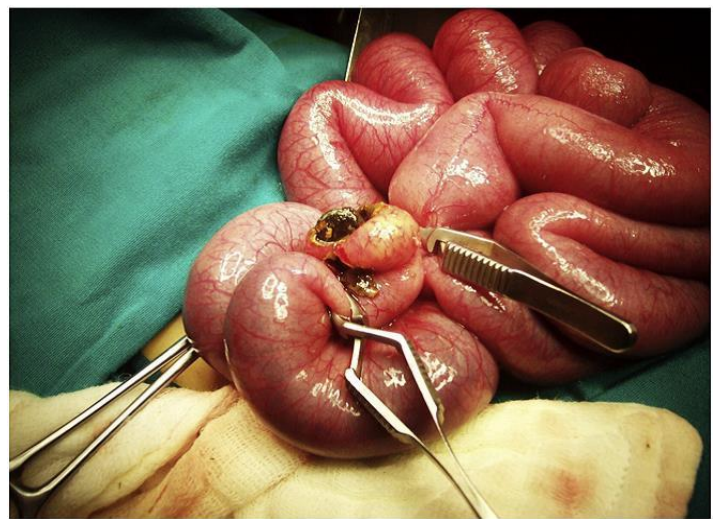
### Case

Here a -10-monhts old girl was admitted with bile stained vomiting and constipation. Physical examination revealed abdominal distention and tenderness. Laboratory tests measured normally. The erect abdominal radiogram revealed intestinal

obstruction and a foreign body with doubled edges suggestive button battery. When her mother was asked about ingestion of suspected foreign body, she did not remember such this event but having some toys powered by such batteries in the household. Abdomen ultrasonography showed only dilatation of small intestinal segments without peritoneal acid. She was suspected intestinal obstruction and sealed perforation due to battery. After preoperative preparation (nasogastric drainage, intravenous hydration and proper medication) she was operated. At laparotomy section we seen that intestinal obstruction due to Meckel's diverticulum perforated by button battery. Resection of ileum segment including diverticulum and primary anastomosis was performed. Post-operative course was uneventful (Figures 1 and 2).



**Figure 1.** Erect abdominal radiogram shows intestinal obstruction and coincidentally detected button battery in the abdominal cavity.



**Figure 2.** Perforated Meckel's diverticulum by button battery.

## Discussion and conclusion

Many factors can be a reason for etiology of intestinal obstruction in childhood. Infants can susceptible to explore any small object around them to their mouths for understand the environment [2]. Sometimes ingestion of foreign bodies can be easily overlooked by parents. Unfortunately some of these pieces such as button batteries can lead unexplained significant complications which may result in dangerous events. Our patient was operated immediately by preventing the button battery causing further damage in the abdominal cavity. The aim of this paper is to remind to clinicians keeping in mind unwitnessed of button battery ingestion when symptoms of unexplained intestinal obstructions is occurred in childhood for preventing significant

morbidity and even mortality. Parents and caregivers should be educated regularly awareness of button battery ingestion to avoid unpleasant results of life threatening injuries.

## References

1. Krom H, Visser M, Hulst JM, Wolters VM, Van den Neucker AM, et al. Serious complications after button battery ingestion in children. *Eur J Pediatr.* 2018; 177: 1063-1070.
2. Bolton SM, Saker M, Bass LM. Button battery and magnet ingestions in the pediatric patient. *Curr Opin Pediatr.* 2018; 30: 653-659.
3. Jatana KR, Rhoades K, Milkovich S, Jacobs IN. Basic mechanism of button battery ingestion injuries and novel mitigation strategies after diagnosis and removal. *Laryngoscope.* 2016; 127: 1276-1282

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