



# Do Not Enter. Exit Only.

Shiho Murai\*1, MD, Sunao Yamauchi, MD\*2

Department of Internal Medicine, Yuuai Medical Center, Okinawa, JAPAN.\*1  
Department of Emergency Medicine, Yuuai Medical Center, Okinawa, JAPAN.\*2

SOCIAL MEDICAL CORPORATION YUUAIKAI  
**YUUAII MEDICAL CENTER**  
50-5 Yone, Tomigusuku-shi, Okinawa, JAPAN 901-0224  
E-mail: s.yamauchi.md@gmail.com

## 【CC】 Constipation, Rectal pain

【HPI】 Patient is a 73-year-old male with PMH of peritonitis due to bowel perforation. The patient presents to ED complaining of **rectal pain**. According to the patient, he has been suffering from chronic constipation for a while and had tried multiple methods to relieve his symptoms. On the day of ED visit, he tried manual fecal disimpaction by himself, only to find it in vain. Therefore, **he decided to stimulate bowel movement by inserting handmade anal-expanding-device**. However, the device moved too deep into rectum and got stuck. The patient presented to ED after multiple unsuccessful self-retrieval attempts. The patient denies abdominal pain, nausea, vomiting or hematochezia.

## 【PE】

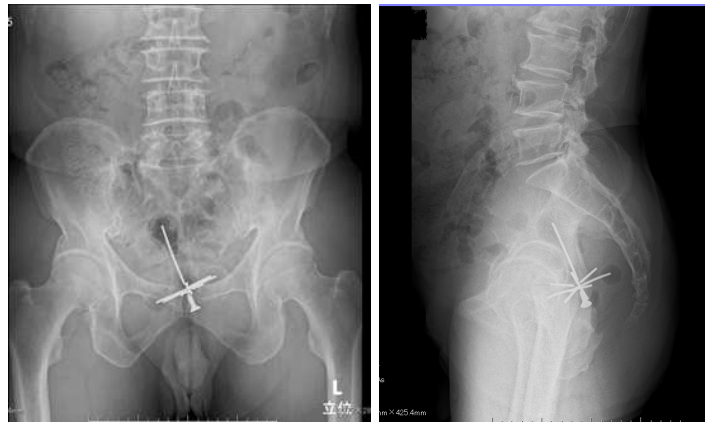
**VS:** Temp 36.5°C (97.7°F), HR 99bpm, BP 154/83mmHg, SpO<sub>2</sub> 97%

**General appearance:** Not in acute distress.

**Abdomen:** Soft and flat. Nontender. No rebound or guarding.

**Rectal exam:** No external hemorrhoid or bleeding. No anal fissure.

**An object, which has a round, slippery, spherical surface with short metal pins protruding from the surface is felt within rectum.**



## Questions:

1. How do you retrieve this rectal foreign body?
2. What are the important complications to consider when managing the patient with rectal foreign body?

## Answers:

1. In general, rectal foreign body is removed either manually or surgically. To make retrieval attempt successful, it is extremely important to know the location, size, numbers, types and structure of the object(s). In addition to imaging studies, you need to perform thorough history taking and physical exam, in order to determine appropriate retrieval method.
2. Serious complications from foreign body insertion includes **bowel perforation, mucosal tear, bowel obstruction and peritonitis.**

## 【Case Discussion】

The inserted object has very complex structure. It consists of **several large plastic balls connected together with metal pins to form a rod, and additionally, multiple smaller plastic balls are attached in circular fashion at the base of the rod**, in order to prevent the object from moving too deep into the rectum.

Since the patient was very cooperative and free from pain, we only used topical anesthesia with lidocaine jelly. With the patient being in knee-chest position, the object was easily visible within the rectum by speculum exam.



While the patient performing Valsalva maneuver in the same position, we used ring forceps to grasp one of the small balls and slowly pulled it towards the anus. After pulling the object close enough to anus, we grasped one of the metal pins sticking out of the ball with needle driver and continued to pull it out. However, the proceeding ball got stuck as it was popping out from the anus and we felt some resistance when applying further traction. At this time, attention was turned to the ball and its attachment, and we found that **one of the pins from the ball was penetrating through mucosa of anal canal**. We manually removed the pin from the mucosa and we had successful retrieval of the object thereafter. Throughout the procedure, the patient was cooperative and denied pain. Sedation was not required.

Physical examination after the procedure showed no abdominal tenderness. However, given that there was visible penetrating injury in anal canal mucosa, we performed CT scan. CT scan showed circumferential thickening and edema of anal and rectal canal with surrounding fat stranding. However, there was no evidence of bowel perforation. Consultation was made to GI team and conservative management was recommended. The patient was discharged to home. Also, before discharge, he was **strictly instructed not to put anything inside the rectum ever again.**

## Clinical Pearls & Take Home Messages:

1. Due to embarrassment, patients may only complain of abdominal or rectal pain and may not mention about foreign body. It is essential for providers to take history and perform physical exam in **thoughtful and nonjudgmental manner.**
2. Accurate information about the type, size, numbers, structure and the location of the object can be obtained by taking good history from the patient, by digital exam and by radiographic imaging studies. **Be very careful to perform digital exam, whenever there's possibility of sharp foreign object.**
3. Don't forget to **consider complications of rectal foreign body.** Consider ordering CT scan, colonoscopy or water-soluble enema whenever there is suspicion for serious complication. If that is the case, do not forcefully perform manual removal but consult surgery for surgical intervention.

**TogetHER, Do Better, Go Further, To Higher.**