EM CASE OF THE WEEK.

BROWARD HEALTH MEDICAL CENTER
DEPARTMENT OF EMERGENCY MEDICINE

BROWARD HEALTH
Care Warriors

Author: Rohin Chand | Editor: Benita Chilampath, DO

July 2017 | Vol 4 | Issue 3

Emergency Management of Rectal Foreign Bodies

A 58-year-old male with no significant past medical history presents to the emergency department with a chief complaint of constipation and abdominal pain for the past 2 days. The patient states that he inserted a carrot into his rectum for sexual pleasure. The abdominal pain is characterized as moderate intensity and the pain is constant. There are no aggravating or alleviating factors. Patient denies any nausea, vomiting, fever, chills, rectal bleeding, or dysuria. Patient is afebrile and vital signs are within normal limits. On physical examination, the abdomen is soft and nondistended. Bowel sounds are heard in all 4 quadrants. There is diffuse abdominal tenderness upon palpation. There is no guarding or rebound tenderness. The remainder of the physical exam is unremarkable. What is the most appropriate next step in the management of this patient?

A. Immediate surgical laparotomy

B. Perform a digital rectal exam

C. Removal of the foreign body using a kocher clamp

D. Anterior-posterior and lateral x-rays of the abdomen

E. Obtain a complete blood count (CBC) and complete metabolic panel (CMP)

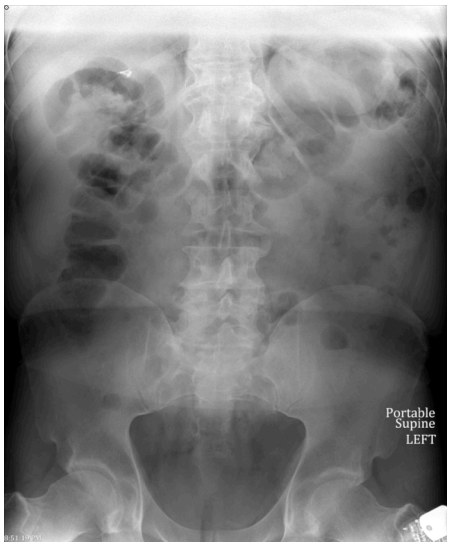


Image of an abdominal x-ray of a patient with a carrot in the rectum. The abdominal x-ray shows no acute findings because the carrot is radiolucent. The next step in the diagnostic workup would be a CT scan of the abdomen and pelvis.

EM Case of the Week is a weekly "pop quiz" for ED staff.

The goal is to educate all ED personnel by sharing common pearls and pitfalls involving the care of ED patients. We intend on providing better patient care through better education for our nurses and staff.

BROWARD HEALTH MEDICAL CENTER

Department of Emergency Medicine
1625 SE 3rd Avenue
Fort Lauderdale, FL 33316

Warriors

BROWARD HEALTH MEDICAL CENTER

April 2016 | Vol 4 | Issue 3

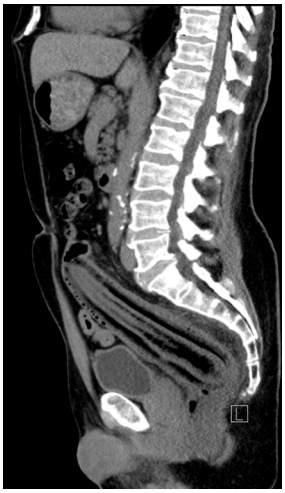


Image of a CT scan of the abdomen and pelvis showing 19 cm carrot in the sigmoid colon with small amounts of gas in the bowel.

The correct answer is D. After conducting a thorough history and physical exam, an abdominal radiograph should be obtained next in order to identify the foreign object. This should be done before performing a digital rectal exam in order to prevent injury from potentially sharp objects.

Discussion

The management of foreign bodies in the rectum is complex and multifaceted. The challenge that is posed during the emergency evaluation of these patients is the delay in their presentation. Patients are often times too embarrassed to seek immediate medical care and may attempt to remove the foreign object on their own. When patients do present to the emergency department, they may be hesitant in providing a detailed description of their complaints. These factors may lead to extensive and unnecessary diagnostic workups. Obtaining a detailed patient history is vital in the successful management of these patients. Patients may complain of vague abdominal pain, constipation, painful defecation, or rectal bleeding. Most objects are inserted directly through the anus however, foreign bodies may also be swallowed and travel through the gastrointestinal tract and become lodged in the rectum. Most patients state that they inserted the object into the rectum for sexual pleasure. Rectal foreign objects have also been reported in the elderly population after attempted use of objects for therapeutic prostatic massage or manual fecal disimpaction.

Diagnostic Workup

Assessing vital signs and performing a thorough physical exam is essential. Fever, tachycardia, and hypotension may suggest active infection or severe bleeding. On abdominal examination, signs of peritonitis such as absent bowel sounds, diffuse tenderness, abdominal rigidity, and rebound tenderness may indicate perforation. Digital rectal examination should be delayed until after an abdominal x-ray is performed and the foreign body is identified. This is to prevent accidental injury to physicians from potentially sharp or hazardous objects. The rectal exam can identify rectal bleeding as well as the position of the object within the rectum. Diagnostic imaging begins with anterior-posterior and lateral x-rays of the abdomen. A CT scan of the abdomen and pelvis is used if the x-ray is unremarkable or if a perforation is suspected. If a patient is determined to be clinically unstable based on vital signs and appearance, intravenous fluids and broad-spectrum antibiotics should be administered immediately.

Treatment

For clinically stable patients, the majority of objects can be removed transanally in the emergency department. In order to facilitate the removal of the object, patients should receive perianal nerve blocks and intravenous sedation to prevent anal spasms and allow direct visualization of the object. Patients should be placed in the high lithotomy position. Patients can assist in the extraction of the object by performing a Valsalva maneuver to move the object toward the rectum. A tenaculum or a kocher clamp may be used to grasp and remove the object. For smooth objects like bottles, obstetric vacuum extractors have been proven to be effective. For sharp objects, manual removal should only be attempted if the object can be directly visualized due to the increased risk of mucosal damage and perforation. Performing a sigmoidoscopy can assist in visualizing the object before attempting removal. For patients with rectal or colon perforation, surgical laparotomy is indicated.

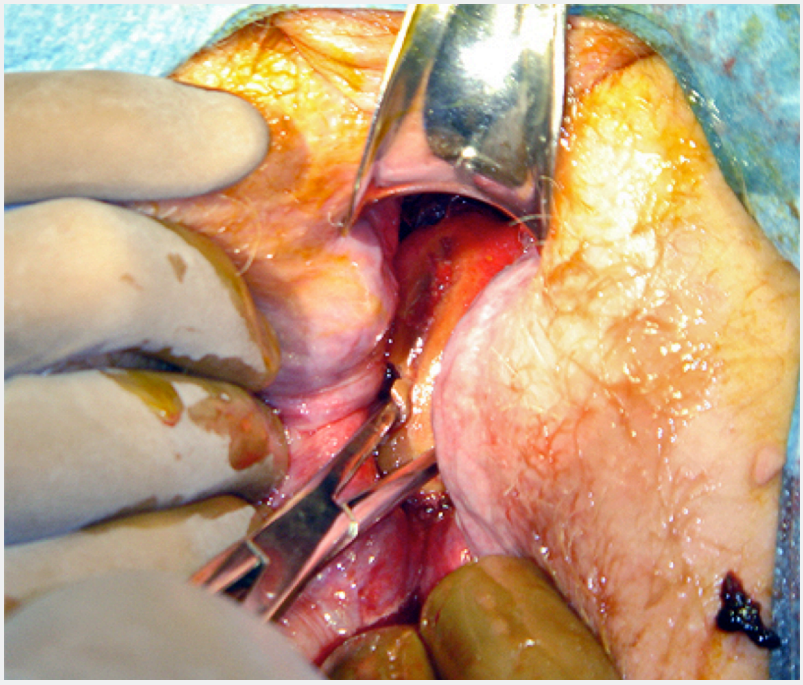
For a list of educational lectures, grand rounds, workshops, and didactics please visit ***BrowardER.com*** and **click** on the ***"Conference"*** **link**.

All are welcome to attend!

Warriors

BROWARD HEALTH MEDICAL CENTER

April 2016 | Vol 4 | Issue 3



Transanal extraction of a foreign body in the rectum with the use of a tenaculum clamp

Post Removal Management

After successful removal of the foreign object, the patient should be evaluated for any mucosal injury. A proctoscope or a flexible sigmoidoscope can be used to visualize the rectal walls. Patients can be discharged on oral analgesics and should follow up within 24-48 hours for re-evaluation.

Take Home Points

- The emergency evaluation of rectal foreign bodies is complicated by the delay in patient presentation as well as an incomplete or inaccurate patient history.
- The diagnosis is based on a combination of a thorough physical exam and diagnostic imaging including abdominal x-rays and CT scans of the abdomen and pelvis.
- Patients should always be assessed for signs of perforation as this is a surgical emergency and requires immediate attention.
- Many objects can be removed transanally within the emergency department.
- After the foreign object has been removed, the patient should be evaluated for rectal wall damage with proctoscopy or sigmoidoscopy.

ABOUT THE AUTHOR

This month's case was written by Rohin Chand. Rohin is a 4th year medical student from NSU-COM. He did her emergency medicine rotation at BHMC in July 2017. Rohin plans on pursuing a career in Internal Medicine after graduation.

REFERENCES

Coskun, Ali, Nazif Erkan, Savas Yakan, Mehmet Yıldirim, and Fevzi Cengiz. "Management of Rectal Foreign Bodies." World Journal of Emergency Surgery. BioMed Central, 13 Mar. 2013. Web. 27 July 2017.

Steele, Scott R., and Joel E. Goldberg. "Rectal Foreign Bodies." UpToDate. Web. 27 July 2017