

Laparoscopic Management of Rectal Perforation Secondary to Self Induced Foreign Body – A Rare case Report



Medical Science

KEYWORDS : rectal perforation, self induced foreign body ,auto-eroticism

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ABSTRACT

Laparoscopically managed rectal perforation secondary to self induced foreign body is a very rare case. Most common causes of rectal perforation are trauma and rectal impalement 1 . males are commonly affected 2,3. late presentations in rectal perforation can prove fatal . Our case was a 23 years old male well educated who presented with severe abdominal pain ,vomiting,1 episode bleeding per rectally and acute urinary retention (catheterised immediately for 1 litre of urine). He gave no other history. On examination he had diffuse pain in the abdomen ,no guarding/ rigidity with fresh blood on DRE. USG suggested features of subacute intestinal obstruction and Xray abdomen standing showed no abnormality . He was admitted in the surgical ward. Ryles tube was inserted.I.V fluids and antibiotics were started .after 8 hours of admission his abdominal pain increased despite appropriate analgesic .he developed guarding all over the abdomen,tachypnea and tachycardia. His repeat xray abdomen standing showed small amount of air under right dome of diaphragm. He was taken up for laparoscopic surgery . Intra-operatively there was evidence of two intact green leaves in the peritoneum with a perforation over the anterior middle one third of the rectum. Leaves were extracted . Perforation was closed primarily . thorough peritoneal wash was given . Sigmoid loop colostomy was done. Postoperative period was uneventfull. Later on in post operative period patient gave a history of per rectal insertion of a pointed wooden stick with leaves at its tip on same morning of presentation. Colostomy was closed after 6 weeks with no complications post operatively. Rectal perforation should be considered as one of the differential diagnosis in cases of perforative peritonitis in young patients with no other obvious etiological factor . self induced foreign body can be a cause of rectal perforation in young patients . immediate surgical intervention is the treatment of choice and have good prognosis in cases of rectal perforation which can be managed successfully by laparoscopic method . such patient should also be referred to the psychiatrist in the post operative period for further psychological treatment .

INTRODUCTION

Foreign bodies are commonly introduced in the rectum for diagnostic or therapeutic instrumentation, self administered treatment, criminal assault,ingestion, auto-eroticism⁴. Anorectal stimulation and penetration is a common sexual practice. For the diagnosis of rectal impalement , special attention should be focused on the history of the patient and physical examination should be performed to discard sexual abuse. The objects placed as a result of assault, trauma or eroticism consist of a diverse collection including sex toys (dildos) ,tools and instruments, bottles ,cans,jars, pipes and tubing, fruits and vegetables, stones,light bulbs and flash lights⁶, etc. Iatrogenic foreign bodies include thermometers ,enema tips, catheters,etc. Those foreign bodies in low or mid rectum upto a level of 10cm from anal verge can be most often removed transanally while those above 10cm may require laparotomy for retrieval ⁷ .Therapeutic protocols are same for rectal perforations including primary repair of perforation with fecal diversion ⁵ . Additionally all such patients should be referred for psychological evaluation to avoid similar problems in future and minimize psychological trauma in assault cases .

CASE REPORT

A 23 years male presented to casualty with pain in abdomen since 10-12 hours ,vomiting (3-4 episodes) ,1 episode of blood stained stools & acute urinary retention. Patient was immediately catheterized and 1 litre of urine was drained .But his abdominal pain was not relieved .So he was given appropriate analgesics.

PA findings – non distended , soft , diffuse tenderness , BS –sluggish . no guarding/rigidity .
Usg – sluggish peristalsis ? sub acute intestinal obstruction .
Xray abdomen standing showed no abnormality.

He was admitted in surgical ward – a Ryle's Tube was inserted. I.V antibiotics ,iv fluids and analgesics were started . Laboratory investigations showed – Hb 12.7 , TLC 11070 , PLT 220000 , urea 31 ,cret 0.5 , na 136 , k 3.8 . after 8 hours of admission his abdominal pain increased despite appropriate analgesic .he developed guarding all over the abdomen, tachypnea (28 cycles/min) and

tachycardia (110 beatss/min) .Repeat xray abdomen standing showed small amount of gas under right dome of diaphragm . patient was immediately taken for laparoscopic surgery .

Intraoperative findings showed 2 intact green leaves in the peritoneal cavity (pelvic region) with 500cc turbid/purulent fluid in the peritoneum . Fluid was aspirated. The leaves were removed .Thorough search was made for the perforation in stomach ,small bowel . but surprisingly there was a 3-4cm transverse perforation on the anterior wall of middle one third of rectum with inflamed,greenish (chemical burns) edges of perforation .Biopsy from edges was taken. Edges were cleaned and sutured primarily with vicryl , thorough peritoneal lawage was given with NS and loop colostomy was made in left iliac fossa region from sigmoid colon . drain was placed in pelvic region and fixed . Ports were removed . procedure and postoperative period was uneventful .



rectal perforation with blackened edges of rectum sutured rectal perforation



Post operative abdomen with colostomy

On post op day 2 after thorough interaction with the patient by a psychologist patient gave history of per rectal insertion of a pointed wooden stick with leaves at its tip for auto-eroticism on same morning of presentation . He was consulted to a psychiatrist for further psychological management . He was discharged home on POD 5 and his colostomy was closed after 6 weeks with no complications.

DISCUSSION

Reports of rectal foreign bodies are uncommon in asia, and majority of case series are reported from eastern Europe 2,3 . The common age group is 16-80 years². Abdominal pain and bleeding per rectally are the common presenting symptoms. Digital rectal examination is the corner stone in the diagnosis. Anorectal impalement injuries have favourable outcome being diagnosed early because of traumatic background of the injuries. Among these injuries the cases of intraperitoneal perforations or multiple traumas to adjacent pelvic organs constitute real emergency and requires a more careful examination. Traumatic rectal perforations can be managed by primary closure alone or primary closure with fecal diversion . The main complication after penetrating perineal injuries is wound infection and abscess formation and subsequently sepsis. That is why fecal diversion still stays a mainstay of management^{8,9}.

The most common and least reported conditions under which foreign bodies are introduced into the anus is that of autoeroticism ^{4,10}. The highest incidence occurs in homosexuals, lesbians and masochist. In our case the misdiagnosis of rectal impale-

ment was due to concealment of history by the patient himself. As soon as perforation was diagnosed clinically and confirmed on xray abdomen standing the patient was taken for laparoscopic surgery . As the site of perforation was unusual it was found after thorough search . It was closed primarily with a sigmoid loop colostomy which was closed after 6 weeks. Consultation with psychologist was done due to suspicion for the cause of perforation. The psychologist was able to find out the cause of perforation (self induced foreign body) after thorough interaction with the patient. Patient was referred to a psychiatrist for further psychological management. They labelled this as autoeroticism .

CONCLUSION

In cases of perforative peritonitis in young patients with no other obvious etiological cause the rectum should also be looked for the site of perforation specially if there is history of bleeding per rectally . Rectal perforations in young patients with no other obvious cause should raise suspicion for self induced rectal foreign body as the etiologic factor . Immediate surgical intervention is the treatment of choice with good prognosis . Such perforations can be managed successfully by laparoscopic method and psychiatric consultation is necessary in the postoperative period to avoid similar problems in future .

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