Case Report

Stercoral ulcer perforation of large gut in opium addicts in west Rajasthan- a case reports

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Abstract

Stercoral perforation of the colon is extremely rare with less than 70 cases reported so far. It is associated with relatively high mortality approaching 35 percent for those managed surgically. Three rare cases of opium addicts with constipation directly leading to stercoral perforation are reported.These were successfully treated surgically by exploratory laparotomy ,repair/resection of affected colon ,colostomy with or without hartmans pouch and follow up colostomy closure after three months.

Key Word: Stercoral perforation, colon; peritonitis; resection; colectomy; diversion; scybala; intraoperative ortho grade colonic lavage

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INTRODUCTION

Stercoral colitis is an inflammatory colitis related to fecal impaction, which results in ischemic pressure necrosis of the rectal and colonic walls, usually the sigmoid colon, due to increased intraluminal pressure; this leads to stercoral ulcer formation and, subsequently, colonic perforation.[3] A correct preoperative diagnosis can facilitate early surgical intervention and thus prevent or mitigate serious complications [4]. Constipation is prevalent among geriatrics due to limited mobility and decreased water intake [5]. We report three patients who suffered a stercoral perforation of the rectosigmoid colon as a direct complication of constipation further enhanced by opium addiction which is quite prevelant in western Rajasthan.

CASE 1

70 years old, Thanaram, resident of Pali, a known opium addict, reported to MG HOSPITAL JODHPUR RAJASTHAN with pain abdomen off and on since 4-5 years. He had been taking medicines from various practitioners without relief. Last 8-10 days he was having severe constipation and had not passed stools. Last 2-3 days he has been having distension of abdomen. Now presented with high grade pyrexia and breathlessness and deteriorating general condition. Examination revealed temp 38.8 ^{0} c, pulse 110 /mt , BP 100/60 mm of HG, extreme pallor and oxygen concentration of 94%. There was Acute and huge abdominal distension with absent bowel sounds. Hb 6gm % TLC 13000/cmm and normal platelet count. X ray standing erect shows massive gas under diaphragm and distended bowel loops with multiple air fluid levels. (FIG 1) USG shows dilated and fluid filled loops with multiple echos and moderate amount fluid in peritoneum. CT abdomen shows thickening of colon , air around sigmoid colon and moderate ascitis.(FIG 2) Exploratory laparotomy was perfomed . Intraoperative findings showed 4 cm perforation at recto-sigmoid junction at ante mesocolonic surface. (fig 3) Sigmoid colon was distended and loaded with faecoliths. Appx 500 ml of peritoneal fluid with faecal matter was drained along with few faecoliths. Faecoliths in sigmoid

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colon were removed through the perforation. Perforation was repaired in single layer with 2/ 0 silk on round body needle. Proximal diversion loop colostomy was done and abd drain was placed . Patient was supported by piperacillin and tazobactum with metranidazol for five days. There was uneventful recovery and the patient was discharged on 10 th day. He was called after three months for follow up and the loop colostomy was closed. The patient has made an uneventful recovery .He has been attending de-addiction centre at Pali but continues to consume opium.

CASE 2

65 year old Punaram resident of Osia Jodhpur an opium addict reported to MG HOSPITAL JODHPUR RAJASTHAN with constipation of 8 years duration but developed acute cramping pain abdomen in left iliac fossa high grade fever and abdominal distension. Examination revealed pyrexia 39.4 ^{0} c, pulse 104 /mt BP 100/70 mmof HG, spo_2 90% .There was generalized tenderness rigidity and guarding all over the abdomen.HB 8.2 gm/ dl, TLC 16400/cmm, platelet count normal. X Ray abdomen standing showed gas under diaphragm and multiple air fluid levels in the large gut.USG ABDOMEN showed dilated fluid filled bowel loops with moderate ascitis. CT abdomen revealed thickened bowel loops fluid filled with air around sigmoid colon and moderate ascitis. Exploratory laparotomy showed peritoneum filled with appr 1000 ml peritoneal fluid and faecal matter. 6 cm oval perforation was seen at rectosigmoid junction at antemesenteric border and faecolomas could be seen through perforation. Resection of perforated segment was done bowel cleaned of faecolomas with colonic lavage.(FIG 4) Hartman pouch and end colostomy was performed and abdomen was closed with drainage.(FIG 5) supportive treatment with antibiotics for five days was given. Patient made an uneventful recovery and was discharged on 10 th post operative day. After 3 months patient was taken up for re exploration and colo rectal anastamosis was done. Patient has recovered well but still attending deaddiction centre at jodhpur.

CASE 3

78 year old A. Hamid of Pokharan Jaisalmer Rajasthan an opium addict reported to MG HOSPITAL JODHPUR RAJASTHAN with complains of chronic constipation distension of abdomen and abdominal pain off and on since last 7 days. On examination puse 94/ mt BP 92/62 mmof HG, temp 37.4 ^{0}c spo_2 90% with oxygen mask. Abdomen was generally distended with generalised tenderness, rigidity and guarding.HB 10.2 gm /dl TLC 14080 /cmm platelet count normal. X Ray standing showed gas under diaphragm and dilated air and fluid filled large bowel loops.USG ABDOMEN showed large bowel loops fluid filled and mild ascitis. CT abdomen revealed thickened bowel wall with fluid filled loops and gas encircling sigmoid colon and mild to moderate ascitis. Exploratory laparotomy revealed appr x 1500 ml peritoneal fluid with faecal matter and fecoliths which was removed. There was a oval perforation of 4 cm at ante mesenteric border of sigmoid colon with studded faecoliths . colonic lavage with manual removal of faecoliths was under taken. Perforation was repaired with 2/0 silk with atraumatic needle and loop colostomy and drainage of abd done. Supportive treatment with 5 days of antibiotics was given. Patient made a slow but complete recovey and was discharged on 12 th day of surgery. He was reviewed after 3 months and closure of colostomy was done. Patent has recovered well and is undergoing de addiction at jodhpur centre.

Figure 1

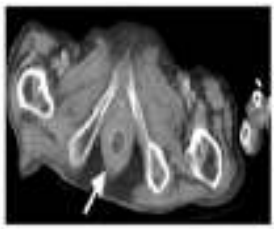

Figure 2

Figure 3

Figure 4

Figure 5

Legend

Figure 5: Resection Hartman Pouch/ End Colostomy

DICUSSION

Stercoral ulcer perforation is perforation of the bowel due to pressure necrosis from hard fecal masses. This was described first by BERRY in1894.[6] Only 67 cases of stercoral perforation of the normal colon have been described to date in the English language literature.[7]Patient's age range between 16 and 83 years (average, 59.3) with both sexes being almost equally affected. Typically, patients are elderly and inactive; as a rule, there is a long history of constipation or use of constipating agents such as anticholinergics, ganglionic blockers, tricyclic antidepresants, phenothiazine neuroleptics and steroids, but this does not seem universally valid for every case reported.[8, 9] addiction with opium and like products which affect gut motility have been precipitating factors. [10] Longtanding obstipation has been ascribed to barium enema [11] as well. Recently, stercoral perforation of the colon has been ascribed to intensive activated charcoal treatment. [12] in the present cases reported all the three patients had been opium addicts. Emergency surgery is undoubtetdly the only appropriate treatment for stercoral perforation of the colon. At operation, most perforations are found to be single (79 %) and located on the antimesenteric aspect of the sigmoid and rectosigmoid (17 % and 30 %, respectively), followed by the cecum (9 %), transverse colon (7 %), descending colon (5 %), and splenic flexure (2 %).[13] The most frequently performed procedure having the highest survival rate is reported to be resection with colostomy.[14] However, in order to escape the risk of a further perforation during the postoperative period, caused by retained fecalomas, intraoperative orthograde colonic lavage must be included as an essential part of the complex surgical treatment. In two of our cases, milking of the colon was performed and faecoliths were removed through the perforations. Nevertheless, the colon of all our patients was cleaned intraoperatively and no perforations occurred during the postoperative period. Mortality is still unacceptably high in this condition, approaching 35%.[15] Possible reasons for the poor prognosis include an older patient age group, rapid clinical deterioration immediately following perforation, and well-established fecal peritonitis at the time of surgery. The results can be improved only by rapid surgical intervention and aggressive resuscitation.

CONCLUSION

We conclude that in patients with a history of severe or chronic constipation presenting with acute symptoms, the possibility of stercoral perforation should be considered. Rapid surgical intervention with resuscitation, exploration, initial HARTMAN procedure followed by end to end anastomosis after 10-12 weeks gives best results.

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