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TRANSANAL SMALL BOWEL EVISCERATION BY SUCTION INJURY

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ABSTRACT
Transanal Evisceration of small bowel is an uncommon entity. This report discusses transanal evisceration of small bowel by suction injury to perineum. Purely perineal trauma is rather an uncommon entity. Perforation in rectosigmoid region with trans anal small bowel evisceration is rare entity which may occur spontaneously or because of trauma. Post traumatic perforation of rectosigmoid region has been reported from blunt trauma abdomen, suction injuries and iatrogenic injuries following reduction of rectal prolapse. An immediate exploratory laparotomy is required for these cases and eviscerated bowel should be gentally reduced back inside peritoneal cavity to have the clear cut idea of the damage occurred.

INTRODUCTION

Transanal Evisceration of small bowel is an uncommon entity. Since first described by Brodie in 1827 [1], less than 80 cases have been described in literature till date. Interestingly not many of these reported cases were found to have similar mechanism which makes every case different in itself. We are here discussing transanal evisceration of small bowel in a young male caused by suction injury to perineum.

CASE REPORT

A 16 year boy presented in our surgical emergency department with evisceration of long bowel segment through anus since 14 hours. As stated by patient he was playing in the pond attached with an electric operated tube well. He was occluding the outlet pipe by his buttocks and was trying to propel himself in the attached pond by the pressure of the water jet. Suddenly there was electric load shedding which has created a high negative pressure through outlet pipe and his buttocks were sucked in. This extreme suction pressure has caused evisceration of long bowel segment through his anus.

On examination patient was fully conscious though apprehensive with stable vital parameters. Around 4 feet of small bowel with mesentery was lying outside anus with its one end still in continuity. The eviscerated bowel segment was dusky, lax and lusterless. [Figure 1]

The eviscerated bowel was packed in wet sterile drape and Patient was adequately resuscitated before shifting to the operating room.

On exploration, we found that jejunum has got transected leaving around 10 cm of jejunum in continuity to duodeno-jejunal junction. Rest whole of jejunum and almost whole of the ileum has got eviscerated through anus via a longitudinal rent in the upper rectum. [Figure 2] The eviscerated segment was in continuity with ileo-caecal junction. Except few centimeters of the terminal ileum, rest whole of the eviscerated segment was having suspicious viability. Hence whole of the non-viable segment was

resected and end to end jejuno-ileal anastomosis was done. Rent in the rectum was repaired with a proximal defunctioning loop sigmoid colostomy.

Post operatively patient was given packed cell transfusion, albumin infusion and total parentral nutrition. Post operative nutritional management was done keeping in mind that patient is at risk of developing short bowel syndrome. Patient was well at discharge and in subsequent follow up visits.

Figure 1. Showing Eviscerated Small Bowel with mesentery

Figure 2. Showing Rent in the upper rectum

DISCUSSION AND CONCLUSION

Purely perineal trauma is rather an uncommon entity and the mode of injury which our patient has suffered makes it worth noticing. Perforation in rectosigmoid region with trans anal small bowel evisceration is rare entity which may occur spontaneously or because of trauma.[2] Few cases of spontaneous rectal perforation have been reported in literature but in elderly females and most of which have associated rectal prolapsed. [2]Some predisposing factors like chronic constipation, straining, enteroptosis and rectal ulceration; have been proposed for spontaneous rectal perforation. [2] Post traumatic perforation of rectosigmoid region has been reported from blunt trauma abdomen, suction injuries and iatrogenic injuries following reduction of rectal prolapse. [3, 4]Hence our patient suffered an extreme degree of suction injury which matches the nature of injury reported by some authors. [5, 6, 7].The diagnosis of these kind of cases is not problematic but the management is really challenging when around whole of the small bowel gets eviscerated and patient presents late when the eviscerated segment has lost its viability; as in our case. An immediate exploratory laparotomy is required for these cases though laparoscopic repair of rectosigmoid perforation and transanal small bowel evisceration has also been reported. [8]. Intra operatively eviscerated bowel should be gentally reduced back inside peritoneal cavity to have the clear cut idea of the damage occurred. The literature suggests that the rent in the rectosigmoid is usually longitudinal and at the antimesenteric border. [3, 4] The gangrenous bowel segment should be resected as in our case and the rent in rectosigmoid should be repaired primarily with consideration of the need for a proximal loop colostomy. We did proximal colostomy because of the peritoneal contamination from the transected jejunal segment and long segment resection done in our case.

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