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COMPLETE RECTAL PROLAPSE WITH CONCOMITANT RECTO-SIGMOIDO-ANAL INTUSSUSCEPTION - A RARE CASE REPORT

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ABSTRACT Intussusception is more common in the pediatric age group and very rare in adults. The presentation, etiology and treatment of adult intussusception is different from that in pediatric age group. Adult colonic Intussusceptions account for only 5% of all cases, out of which only 1% present as obstruction. Often the diagnosis in adults is delayed due to vague, chronic and non-specific symptoms that are either ignored or treated symptomatically. Rectal prolapse is more common in geriatric age group compared to younger population. Colonic intussusception can be associated with a rectal prolapse. In children the symptoms of intussusception include palpable abdominal mass, fresh blood in stools and colicky abdominal pain. However, in adults, symptoms consist of bloody stool, constipation or symptoms suggestive of malignancy such as weight loss, altered bowel habits and loss of appetite. We present a case of a complete rectal prolapse with strangulated rectosigmoid intussusception for which sigmoid resection was done with reduction of rectal prolapse, rectosigmoid anastomosis, mesh rectopexy and diverting transverse colostomy.

KEYWORDS : Recto-Sigmoido-Anal Intussusception, Rectal Prolapse, Sigmoid Intussusception Prolapse per Anus, Intussusception prolapsing from the rectum. Complete Procidentia.

INTRODUCTION

Intussusception is the telescoping of a segment of gastrointestinal tract (intussusceptum) into another proximal or distal segment (intussuscipiens). Barbett of Amsterdam first reported intussusception in 1674. In 1871, Sir John Hutchinson was the first to successfully operate on a child with intussusception. Adult intussusceptions are rare compared to childhood intussusception with adult coloanal intussusception accounting only about 5% of all cases. Rectosigmoid intussusception can rarely be associated with rectal prolapse. In contrast to children, 90-95% of adult cases of intussusception have an identifiable cause, 2/3rds of which are malignancy.

CASE REPORT

A 45-year-old, male patient presented to the emergency department with complaints of mass protruding out of anus, severe perianal pain, constipation and bleeding per rectum. The mass was irreducible since past 1 day. He was operated for rectal prolapse 20 years back (details unavailable). The patient gives a history of mass per rectum which spontaneously reduced initially and subsequently required digital reduction for past 10 years. He is a chronic smoker and occasionally drank alcohol. Family history was insignificant. Patient attempted reduction of the mass but it was unsuccessful. On admission, pulse was 110/min and blood pressure were recorded at 130/80 millimeters of mercury. On abdominal examination, a right infraumbilical paramedian scar was visible.

On per rectal examination of the mass, it was a complete rectal prolapse with loop of sigmoid colon protruding through anus. There was a 6 cm groove between the completely prolapsed rectum (procidentia) and the intussuscepted sigmoid colon loop, a total of 30 cm in length. The prolapsed part of sigmoid colon had undergone dusky red discoloration and showed sluggish peristalsis and a few ulcerations (pre-gangrenous changes). Patient was immediately shifted to emergency OT and at first, reduction of the intussuscepted sigmoid colon loop with rectal prolapse was attempted under intravenous sedation but proved to be unsuccessful. Then patient was induced with proper general anesthesia and in lithotomy position, repeat reduction was attempted but the mass was still irreducible. Decision was taken to resect the intussuscepted sigmoid colon loop totally via perineal approach. Resection was carried out layer by layer, taking precaution not to injure any healthy bowel segments that might have protruded through the prolapse. First, anterior outer layer was opened followed by anterior inner layer. It was confirmed that no small bowel loops were incarcerated in the prolapsed part. Posterior inner and outer layers were excised next. Then the inner and outer sigmoidal layers were approximated with tagging sutures to ease identification once the residual mass was reduced. Once the prolapsed mass reduced in size, prolapsed rectum could easily be reduced. After reduction of the rectum, anal encircling Thiersch stitch was taken with Loop Polypropylene sutures. Patient was then shifted to supine position. Midline abdominal incision was taken. The rectal stump was visualized 5 cm proximal to the peritoneal reflection and appeared dusky red. At this point the options were to do a Hartmann's procedure leaving the patient with a permanent colostomy, or to give a trial to anastomosis. Edges of the rectal stump were then freshened and bleeding from the fresh edges was confirmed. Also return of healthy red color was noted in the rectal stump and resected colon once 100% oxygen was administered. Intraoperative findings suggested that patient had undergone sigmoidopexy previously but there was no evidence of mesh rectopexy in the previous procedure. The remaining descending colon (after resection) was anastomosed with rectal stump in end-to-end fashion in two layers. Rest of the bowel was traced and found to be normal. Polypropylene mesh posterior rectopexy was done. Proximal transverse colostomy was done for diversion. Patient's post-operative period was uneventful. Histopathological examination of the resected specimen suggested viable margins, mucosal ulcerations, chronic inflammatory infiltrates, hyperplastic muscularis propria, ischemic changes and serosal congestion. There was no evidence of atypia, parasite, granuloma or malignancy.

DISCUSSION

Majority of intussusceptions are common in pediatric population and rare in adults. Peak incidence of complete rectal prolapse is seen in fourth and seventh decades of life. In adult population, male to female ratio is 1:6. It is unusual to find cases of young patients with rectal prolapse. In general, diagnosis and treatment of this condition is delayed due to vague, non-specific and chronic symptomatology. However, all patients complain of abdominal pain. Other symptoms include nausea, vomiting, abdominal distension,

constipation, fever, abdominal lump and rarely prolapse of intussuscepted bowel. Diagnostic methods include contrast abdominal radiographs (contraindicated in obstruction and perforation), ultrasonography (investigation of choice) due to its wide availability and low cost but is limited by operator dependence. It shows 'target sign' or 'onion skin' appearance on cross-sectional view and 'pseudo-kidney' or 'double-kidney' sign on longitudinal view. According to studies, pre-operative CT scan (contrast enhanced) offers most sensitivity (88.6%) and should be used whenever possible. Colonoscopy is another modality which is now being used for diagnosis as it might reveal both intussusception and underlying cause such as a polyp or tumor. Adult cases of intussusceptions are very rare and almost always have an etiology such as a malignant tumor or benign neoplasm or polyp presenting as lead point and most commonly are identified only intraoperatively. In this case however, there was no identifiable cause which is true in 5-10% cases only. Reduction of colo-anal intussusception with prolapse should be attempted initially in order to preserve sphincter function. If unsuccessful, as in this case, resection followed by reduction should be done. Adult intussusception on the other hand is not simply reduced but resected primarily to avoid spillage of malignant cells which is the case in most patients.

CONCLUSION

Complete rectal prolapse with Recto-Sigmoido-anal intussusception in adults is rare. Almost all adult patients have an underlying pathology to the condition such as malignancy but idiopathic cases also occur. Resection of strangulated sigmoid colon followed by reduction of viable bowel, end to end anastomosis, mesh rectopexy and a diversion transverse colostomy is a feasible option.

Figure 1: Image in Casualty.

Figure 2: Failure of manual reduction.

Figure 3: Image in OT

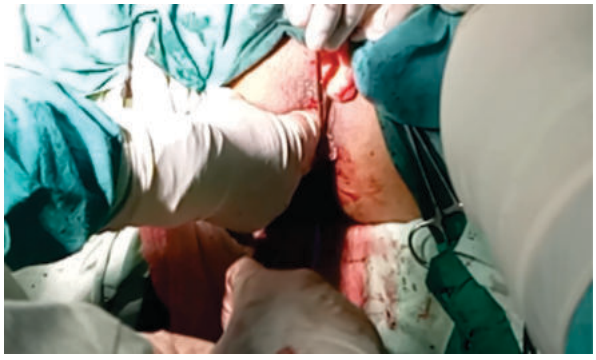

Figure 4: Sigmoid Excision and Reduction of Rectum

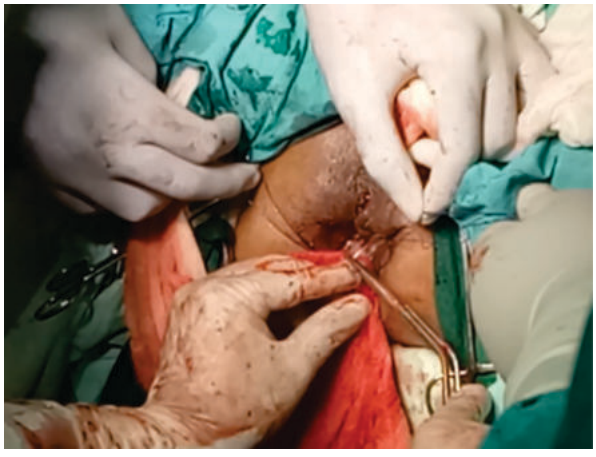

Figure 5: Thiersch stitch

Figure 6: Post Operative.

REFERENCES

1. Severe adult ileosigmoid intussusception prolapsing from the rectum: A case report. Rongrong Chen, Haitao Zhao, Xinting Sang, Yilei Mao, Xin Lu and Yifan Yang. .Published: 30 September 2008 Cases Journal 2008, 1:198 doi:10.1186/1757-1626-1-198.
2. Loay M. AlJaberi,Alaa K. Salameh, Rafiq M. Salhab,Hazem A. Ashhab. Idiopathic Sigmoid Intussusception Prolapse per Anus, International Journal of Case Reports, 2018 2:23 eSciPub LLC, Houston, TX USA. Website: http://escipub.com/
3. Sigmoidoanal intussusception with exteriorization of sigmoid adenocarcinoma Pedro Roberto De Paula, Maria Auxiliadora Prolungatti César, Eduardo Fortes De Albuquerque, Fernanda Perez Adorno Da Silva. Journal of Coloproctology July/September, 2011.
4. Prolapsed sigmoid intussusception per anus in an elderly man: a case report. Penn S Teyha, Alphonce Chandika and Vihar R Kotecha. Teyha et al. Journal of Medical Case Reports 2011, 5:389_http://www.jmedicalcasereports. com/content/5/1/389
5. To the Editor: Sigmoido-anal intussusception presenting as rectal prolapse: role of endoscopic diagnosis. Volume 47, No. 6, 1998 Gastrointestinal Endoscopy