Acta Scientific Gastrointestinal Disorders (ISSN: 2582-1091)

Volume 3 Issue 5 May 2020

Case Report

Adult Sigmoido-Rectal Intussusception Presenting as Gangrenous Bowel and Rectal Prolapse: A Rare Presentation

Renu Saini[1], Urmila Basu[1], Niraj Kumar[1], Raj Mithun Degala[1] and Sanjay Kumar Dubey[2]*

[1]DNB Resident, Department of General Surgery, Rabindranath Tagore International Institute of Cardiac Sciences, Kolkata, West Bengal, India

[2]Consultant Surgeon, Department of General Surgery, Rabindranath Tagore International Institute of Cardiac Sciences, Kolkata, West Bengal, India

***Corresponding Author:** Sanjay Kumar Dubey, Consultant Surgeon, Department of General Surgery, Rabindranath Tagore International Institute of Cardiac Sciences, Kolkata, West Bengal, India.

Received: March 19, 2019

Published: April 28, 2020

Abstract

Intussusception in adults especially sigmoido-rectal intussusceptions is extremely uncommon. In this report we have described a case of sigmoido-rectal intussusception in an elderly gentleman presenting as prolapsed gangrenous bowel who underwent laparotomy and resection anastomosis and made an uneventful recovery. Adult intussusceptions are generally associated with a pathological entity predominantly malignant. Insidious presentation with vague abdominal pain is the usual presentation and emergency presentation as seen in our case with gangrenous prolapsing bowel in the absence of a predisposing etiology is extremely uncommon. While adult intussusception usually requires operative intervention controversy exists with respect to attempted reduction prior to resection.

Keywords: Intussusception; Prolapse; Gangrenous Bowel; Sigmoido-Rectal Intussusception

Abbreviation

CT: Computed Tomography

Introduction

Intussusception in adults is extremely uncommon and when occurs is most commonly of the colo-colic variety [1]. Sigmoido-rectal intussusception in adults is extremely rare and presenting symptoms are commonly nonspecific and is associated with malignancy in majority of the cases [2,3].

We report a case where sigmoido-rectal intussusception presented in an elderly gentleman as an emergency with prolapsed gangrenous bowel without any associated pathology of the bowel.

Case Report

A 75 year old gentleman presented to the emergency department with an 8 hours history of prolapsed bowel. The prolapse happened at the time of defecation. Apart from history of constipation there were no other previous gastro-intestinal symptoms.

On examination approximately 35 cm of gangrenous bowel was prolapsing and appeared frankly gangrenous. The patients was systemically unwell with fever tachycardia, and features of dehydration. Fluid resuscitation was started and preliminary blood tests done that showed features of leucocytosis Because of the prolapsing gangrenous bowel and the patient appearing systemically unwell a decision to perform emergency laparotomy without attempting to reduce the prolapsed mass or any imaging investigations like ultrasonography or CT scan was taken. Laparotomy revealed sigmoido-rectal intussusception which had became gangrenous. The intussuscepting sigmoid colon along with the prolapsed mass was resected upto viable descending colon proximally. The distal resection of the bowel was at the level of upper third of the rectum. An end to end hand sewn colorectal anastomosis was done with extra-mural interrupted 3/0 vicryl sutures. Post-operatively, the patient made an excellent recovery and apart from paralytic ileus, which resolved on conservative management no other issues were confronted. No lead point could be identified in the resected specimen and no evidence of malignancy, poly, lipoma, stricture or diverticulum was seen on histopathological examination which showed only non-specific inflammation.

The uniqueness of this report lies in the emergency presentation of prolapsed gangrenous bowel due to sigmoido-rectal intussusception in an elderly patient in the absence of any known etiological pathology.

Discussion

Bowel intussusceptions in adult population is in itself uncommon accounting only for 5% of the cases and often associated with a pathological lesion acting as a lead point [4]. Most of these cases remain undiagnosed and are often diagnosed only on laparotomy.

Figure 1: Congested and odematous prolapsed colon.

Figure 2: Intraoperative view of sigmoidorectal intussusception.

In adults, colo-colic intussusception is the most common type of intussusception. Presentation is often with non-specific signs and symptoms and it usually runs a chronic or sub-acute course [1].

The triad of abdominal pain, palpable mass and bloody stool in adults is extremely unusual. Abdominal pain followed by nausea and vomiting, and bleeding per rectum are seen and the duration of symptoms is longer in benign compared to malignant lesions. The symptoms are also longer in enteric compared with colonic lesions [2]. Thus due to the vague presentation the diagnosis of adult intussusception is often challenging. The presentation as in our case is highly unusual.

Moreover, adults intussusception is rarely seen without an associated pathological entity which is predominantly malignant. Among the non –malignant causes meckel's diverticulum, strictures, polyps and colonic lipomas of the rectosigmoid region leading to sigmoid rectal intussusceptions in adults have been reported [2,3].

Even though due to the emergent nature of presentation in our patient we did not carry out any investigation it is generally accepted that abdominal CT is the most sensitive diagnostic modality with reported accuracy ranging from 58% to 100% [5].

While majority of intussusception in children are amenable to non-surgical means, adult intussusception often requires operative intervention. The only controversy exists with respect to attempted reduction prior to resection. As malignancy may be the underlying cause in a significant proportion of these patients reduction of the intussusception prior to resection caries the risk of disseminating malignant cells. Equally successful reduction may lead to preservation of considerable lengths of the bowel [1]. In our patient gangrenous bowel precluded any attempts at reduction.

In keeping with our patient who was 75 years old adult intussusception has often been reported in the elderly. [6-8]. It may be so that pathological changes in the bowel that appear with age act as a lead point for intussusceptions and at the same time weakening of pelvic muscles coupled with increased intra-abdominal pressure during defecation predisposes to prolapse in these elderly patients.

Conclusion

Adult intussusceptions is extremely uncommon. Sigmoido-rectal intussusception in adults is even more uncommon. In these cases insidious presentation and presence of a pathology is the norm. Presentation as in our case with gangrenous prolapsing bowel in the absence of a predisposing etiology is extremely uncommon.

Bibliography

1. Mohamed M., *et al*. "Adult sigmoidorectal intussusception related to colonic lipoma: A rare case report with an atypical presentation". *International Journal of Surgery Case Reports* 10 (2015): 134-137.

2. Azar T and Berger DL. "Adult intussusception". *Annals of Surgery* 226.2 (1997): 134-138.

3. Marinis A., *et al*. "Intussusception of the bowel in adults: a review". *World Journal of Gastroenterology: WJG* 15.4 (2009): 407.

4. Eisen LK., *et al*. "Intussusception in adults: institutional review". *Journal of the American College of Surgeons* 188.4 (1999): 390-395.

5. Ongom PA and Kijjambu SC. "Adult intussusception: a continuously unveiling clinical complex illustrating both acute (emergency) and chronic disease management". *OA Emergency Medicine* 1.1 (2013): 3.

6. Yalamarthi S and Smith RC. "Adult intussusception: case reports and review of literature". *Postgraduate Medical Journal* 81.953 (2005): 174-177.

7. Du JZ., *et al*. "Adult rectosigmoid junction intussusception presenting with rectal prolapse". *Singapore Medical Journal* 56.5 (2015): e78-e81.

8. Mahmood A., *et al*. "Adult intussusception presenting as rectal prolapse". *BMJ Case Reports* (2014): bcr2013203281.