

## Acute Colonic Obstruction Because of Colorectal Intussusception

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### Abstract

Colo-rectal intussusception is rarely seen in adults, but is associated with a high risk of underlying neoplasia as the cause of disease. Obstructive symptoms are usually present and the condition might require emergent surgical intervention. We report a case of sigmoideo-rectal intussusception.

### Introduction

Intestinal intussusception is usually seen in the pediatric population, however adults accounts for about 5% of all cases [1]. Initial symptoms like pain, nausea, bleeding or obstruction can be sparse which may explain why almost 50% is diagnosed per-operatively. In the majority of cases of adult intussusception pathology is found in the bowel in contrast to the majority of idiopathic cases in children [2].

### Materials and Methods

A 63 year old woman was admitted with rectal bleeding, lower abdominal pain and a previous weight loss of 4 kg. At rectal examination a soft tumor was felt, confirmed by subsequent sigmoidoscopy where it was found to obstruct the rectal lumen 8 cm from the anal verge. Rectal cancer was suspected and biopsies were taken, however the following days the patient started to vomit and presented with colonic obstruction confirmed on x-ray. CT and MR scan showed four layers in the rectal wall and intussusception was suspected (Figure 1). Laparoscopy was performed and converted to laparotomy due to fixation of the invaginate and proximal colonic dilatation. The sigmoid colon was invaginated down to the pelvic floor (Figure 2). Recto-sigmoid resection and colostomy was done. At pathological examination a 7 x 7 cm tubulo-villoseous adenoma was found in an ischemic invaginated sigmoid colon.

### Results and Discussion

Colonic neoplasia such as cancer or lipoma has been shown in previous case reports to cause colo-rectal invagination in adults, however to our knowledge a tubulo-villoseous adenoma as the cause of disease has only been described once before in the literature [3]. In a recent retrospective review of 148 adults cases with intussusceptions – only 7% patients presented with colo-colonic intussusception, and compared to patients with ileo-colic disease they rarely went directly to the emergency department, which might have been due to the distal disease in the bowel delaying the obstructive symptoms [4].



Figure 1: Tubulo-villoseous adenoma.

Adults commonly presents with obstructive symptoms (pain, nausea, vomiting or bloody stool) and in most cases a preoperative CT should be performed to confirm the diagnosis to avoid any unnecessary laparotomy. In addition, signs of malignancy or metastatic disease may be detected by CT as well, which is crucial when planning the operative strategy as demonstrated in our case. However, invaginating bowel may become necrotic because of obstruction of the blood flow and oedema of the bowel wall resulting in clinical signs of peritonitis, thereby making this condition an emergency. In this case definitive surgical treatment without reduction of the intussusception is usually recommended because of the risk of perforation [3-5].

### Conclusion

Colo-rectal intussusception is a very rare condition but may cause colonic obstruction and ischemia. Preoperative CT is recommended because of the high risk of underlying neoplasia, but when signs of peritonitis are present laparoscopy or laparotomy should be performed.



Figure 2: The sigmoid colon was invaginated down to the pelvic floor.

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## References

1. Azar T, Berger DL (1997) Adult Intussusception. *Ann Surg* 226: 134-138.
2. Erkan N, Hacıyanlı M, Yildirim M, Sayhan H, Vardar E, et al. (2005) Intussusception in adults: an unusual and challenging condition for surgeons. *Int J Colorectal Dis* 20: 452-456.
3. Park KJ, Choi HJ, Kim SH, Han SY, Hong SH, et al. (2006) Sigmoidorectal intussusception of adenoma of colon treated by laparoscopic anterior resection after sponge-on-the-stick-assisted manual reduction. *World J Gastroenterol* 12: 146-149.
4. Lindor RA, Bellolio MF, Sadosty AT, Earnest F 4th, Cabrera D (2012) Adult Intussusception: Presentation, Management and Outcomes of 148 Patients. *J Emerg Med*. Epub ahead of Print.
5. Toms N, Bicknell C, Harrison R (2009) Colo-anal intussusception in an adult: case report and review of the literature. *Int J Clin Pract* 63: 175-176.