

A Case Report of Undiagnosed Chronic Constipation With Considerable Stool Burden

Andrej M. Sodoma¹, Nicholas J. Knott², James R. Pellegrini³, Scarlett Alvarez¹, Mary Thomas⁴

Review began 03/19/2025

Review ended 04/05/2025

Published 04/08/2025

© Copyright 2025

Sodoma et al. This is an open access article distributed under the terms of the Creative Commons Attribution License CC-BY 4.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

DOI: 10.7759/cureus.81914

1. Internal Medicine, South Shore University Hospital, Bay Shore, USA 2. Osteopathic Medicine, New York Institute of Technology, Jonesboro, USA 3. Internal Medicine, Nassau University Medical Center, East Meadow, USA 4. Gastroenterology, South Shore University Hospital, Bay Shore, USA

Corresponding author: Andrej M. Sodoma, andrejsodoma97@gmail.com

Abstract

Chronic constipation is a prevalent issue in the United States that a majority of people have experienced at some time, with a variety of severity. Sometimes, people can become constipated for prolonged periods for various reasons. This is detrimental to one's health because the stool can build up in the colon and harden, creating obstipation. A 25-year-old female with an extensive history of chronic constipation and a history of hospitalization requiring medical management presented to the hospital with a chief complaint of minimal passage of stool over the last four months. Her vitals and labs were within normal limits. However, on physical exam, her abdomen felt like clay. A computed tomography (CT) scan showed a significant stool burden. The patient declined total colectomy with end ileostomy. She went for manual disimpaction under anesthesia, where they were able to evacuate stool up to the distal sigmoid colon. Following the procedure, the patient adhered to a pure liquid diet and a bowel regimen. Over time, the patient improved and was discharged on Miralax twice daily, with instructions to follow up with Gastroenterology and Colorectal Surgery for further monitoring. However, the patient did not follow up. A stool burden of this caliber is rarely seen. In this rare case, the patient resumed her everyday life with only medical treatment and endoscopy, offering a commentary on the current standard of care. Indeed, removing the aganglionic segment is the ultimate solution. However, surgery could potentially wait if the patient improves in this manner.

Categories: General Surgery, Gastroenterology, Internal Medicine

Keywords: : constipation, fecal disimpaction, gastrointestinal motility, ibs-c, obstipation

Introduction

Chronic constipation is characterized by unsatisfactory defecation, difficulty with defecation, and unsatisfactory stooling [1]. Chronic constipation ranges from 9% to 20% of Americans, which is a highly prevalent problem that the majority of people have experienced at some time [2,3]. The Rome IV criteria say someone has it if two of the following six conditions are met. The symptoms have been present for three months in more than 25% of bowel movements: straining while defecating, hard stools, the feeling of incomplete evacuation, the sense of an anorectal blockage, having to do manual maneuvers to defecate, and having less than three bowel movements per week. The constipation severity index measures constipation as mild (less than three bowel movements per week with minimal discomfort), moderate (one to two strenuous bowel movements per week with abdominal pain), and severe (less than one per week and can impact the quality of life) [4].

Sometimes, when the stool burden builds up enough, the stool hardens, creating obstipation and the inability to pass stool or gas. Obstipation can be a result of several pathologic factors, including trauma, surgery, electrolyte imbalance, chronic constipation, and obstruction causing colonic inertia (CI). CI is a severe type of chronic constipation with significantly slowed stool transit, affecting 5% to 30% of patients with slow-transit constipation [5]. With this broad differential, understanding the underlying etiology is prudent for management, as it can vary from noninvasive medical management to invasive surgical management. In this case report, a patient came in with a history of severe constipation with a significant stool burden. The standard of care for these cases is definitive therapy with surgical removal of the affected portion of the colon. However, the patient refused treatment, opting for medical interventions only, with evident improvement and resumption of everyday life.

Case Presentation

A 25-year-old female presented to the hospital for abdominal pain and lack of bowel movement for four months. She has a history of chronic constipation, starting around the time she was toilet-trained. Besides imaging to confirm the etiology of the abdominal pain, which would be revealed as a significant stool burden, no manometry or biopsy was performed for the diagnosis of the root cause of the constipation. She needed weekly enemas and daily stool softeners, with multiple hospital visits for manual disimpaction in the operating room (OR) under anesthesia before this admission. After the most recent hospital stay a few years ago, the patient followed up with Gastroenterology, who prescribed a bowel regimen of polyethylene glycol

How to cite this article

Sodoma A M, Knott N J, Pellegrini J R, et al. (April 08, 2025) A Case Report of Undiagnosed Chronic Constipation With Considerable Stool Burden. Cureus 17(4): e81914. DOI 10.7759/cureus.81914

3350. Her constipation was improving, so over a year, her treatment was adjusted from taking a gallon of GoLYTELY (polyethylene glycol 3350) daily to one packet of Miralax (polyethylene glycol 3350) per day. The most recent visit with her gastroenterologist was seven months before her current hospital admission. During that visit, her Miralax dosage was reduced from two packets to one packet per day. After the dosage change, she began intermittently skipping doses and stopped taking Miralax altogether because she did not see the importance of taking a single packet of Miralax daily.

When presenting to the hospital, the patient endorsed minimal passage of stool in the last four months. She experienced occasional involuntary leakage of watery stool every few weeks. The patient never returned to the previous regimen of Miralax or revisited Gastroenterology due to societal obligations. A few weeks before admission, the patient began to experience abdominal pain and abdominal distension, not responsive to over-the-counter stool softeners, stimulant laxatives, and enemas, prompting the patient's visit to the emergency department (ED).

On arrival, the patient was vitally stable (Table 1). Labs showed a complete blood count within normal limits (Table 2) and a basic metabolic panel within normal limits (Table 3). On physical exam, the patient's abdomen was firm with generalized tenderness but no rebound tenderness. The left lower quadrant (LLQ) and right lower quadrant (RLQ) felt like clay. When pressing, the practitioner could leave indents in the abdomen due to the stool burden. A rectal exam was performed, and no hemorrhoids/fissures were visualized. Adequate rectal tone and hard, dark brown stool in the rectal vault. A computed tomography (CT) scan of the abdomen and pelvis was ordered. It showed a 15-cm-diameter redundant sigmoid colon that was stretched out and had a lot of stool in it all along the GI tract (Figure 1).

Complete blood count with differential		Normal range
White blood cell count (cells/uL)	6,460	4,000-11,000
Red blood cell count (M/uL)	4.69	3.80-5.20
Hemoglobin (g/dL)	12.9	12-15.5 (women)
Hematocrit (%)	41	36-48 (women)
Mean cell volume (fL)	87.4	80-100
Mean cell hemoglobin (pg)	27.5	27-34
Mean cell hemoglobin concentration (g/dL)	32	32-26
Red cell distribution width (%)	13.3	10.3-14.5
Platelet count (mcl)	266,000	150,000-450,000
Neutrophil automated count (K/uL)	3.83	1.80-7.40
Lymphocyte automated count (K/uL)	2.07	1.00-3.30
Monocyte automated count (K/uL)	0.39	0.00-0.90
Eosinophil automated count (K/uL)	0.12	0.00-0.50
Neutrophil automated percent	59.3	43-77
Lymphocyte automated percent	32.0	13-44
Monocyte automated percent	6.0	2-14
Eosinophil automated percent	1.9	0-6
Basophil automated percent	0.6	0-2
Immature granulocyte automated percent	0.2	0.0-0.9

TABLE 1: Complete blood count with differential on admission

Vitals		Normal range
Blood pressure (mmHg)	114/77	<120/<80
Heart rate (bpm)	84	60-100
Respiratory rate (rpm)	20	12-20
Temperature (F)	98.4	97-99
Oxygen saturation (%)	97	95-100

TABLE 2: Vital signs on admission with normal value ranges

Basic metabolic panel		Normal range
Sodium (meq/L)	139	135-145
Potassium (meq/L)	4.5	3.5-4.5
Chloride (meq/L)	106	96-106
Bicarbonate (meq/L)	22	22-29
Anion gap (meq/L)	12	4-12
Blood urea nitrogen (mg/dL)	9.8	6-24
Creatinine (mg/dL)	0.62	0.5-1.1
Glucose (mg/dL)	88	<140 (random)

TABLE 3: Basic metabolic panel on admission with normal ranges

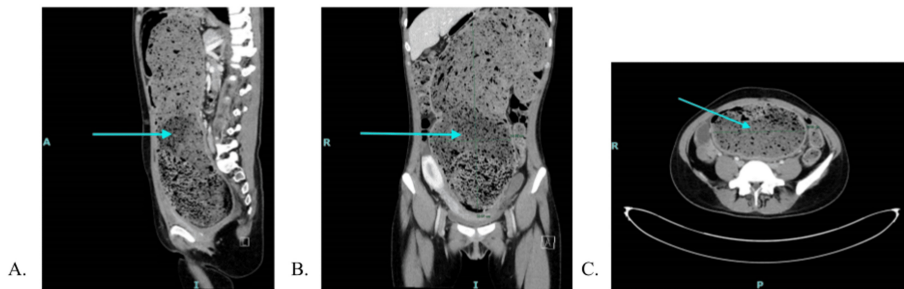


FIGURE 1: CT abdomen/pelvis with IV contrast on the day of admission, demonstrating a distended colon

A: Sagittal view. B: Coronal view. C: Transverse view.

The blue arrow points at the most distended portion of the colon.

We consulted Gastroenterology and Colorectal Surgery about disimpaction and the potential need for a colectomy. The patient declined enemas, suppositories, and manual disimpaction at the bedside due to severe discomfort and minimal to no results during previous hospitalizations. Colorectal Surgery offered a total colectomy with end ileostomy and a biopsy of the removed tissue to find out what was causing the constipation, but the patient turned it down.

She went for manual disimpaction under anesthesia. Once the patient was anesthetized, the endoscopist manually disimpacted and then advanced the colonoscope into the center of the stool. The stool was then flushed with saline to loosen it and then dragged distally to remove it manually. The process was repeated

multiple times up to the distal sigmoid colon. At that site, the endoscopist could not advance the colonoscope because of a lack of visibility as the stool was tough, and no amount of softening with lavage could move the stool. Also, the practitioner could not reach that area manually, so the procedure had to be stopped. During the procedure, it was noted that the colon was markedly dilated, and the stool resembled dense/moist clay. Following the procedure, the patient adhered to a pure liquid diet and a bowel regimen, including Miralax twice daily and a gallon of GoLYTELY daily. Her hospital course included a total recorded stool count of 21. Her admission weight was 128.9 lbs, and her discharge weight was 119 lbs. Before discharge, a CT scan of the abdomen was repeated to determine the extent of resolution (Figure 2). The patient was discharged on Miralax twice a day, with instructions to follow up with Gastroenterology and Colorectal Surgery for further monitoring. The patient followed up with Gastroenterology; her laxative regimen was tapered down further, and a repeat colonoscopy with biopsy was scheduled. Unfortunately, the patient did not attend the procedure and was lost to follow-up.



FIGURE 2: Repeat CT abdomen/pelvis with IV contrast on the day of discharge, demonstrating the colon cleared of stool

A: Sagittal view. B: Coronal view. C: Transverse view.

The blue arrow points at the formerly most distended portion of the colon post-medical and endoscopic management.

Discussion

The patient discussed had a longstanding history of chronic constipation, which required daily bowel regimens that included laxatives, stool softeners, and enemas routinely since childhood to ensure a regular bowel movement. She stopped this regimen without resumption for four months, causing severe stool burden. The patient already had a long-standing history of daily motility agents, and once stopped, manual disimpaction was required, which is a hallmark of CI [6]. CI is rare and more severe than constipation, and CI is more common among older individuals [7]. It is more severe because it is an inherent issue with GI motility.

GI motility is performed by the interstitial cells of Cajal (ICC), which develop from the migration and maturation of neural crest cells [8]. Hirschsprung disease (HD) is described as the lack of neural crest migration, including ICC, to the distal colon, resulting in a malfunctioning segment and chronic constipation [9]. The lack of ICC is the most common histologic finding in patients with CI, suggesting an overlap in those with adult-onset HD, resulting in an overbearing stool burden [10]. Colonic pseudo-obstruction, whether acute or chronic, can present similarly, with an increased risk of ischemia and perforation as the colon dilates to catastrophic diameters [11]. The etiology of pseudo-obstruction has been described as myopathic, mesenchymopathic, and neuropathic, including loss of integrity of ICC, suggesting another overlapping condition leading to increased stool obstipation [12,13]. A detailed differential diagnosis is outlined in Table 4.

Differential diagnosis
Irritable bowel syndrome
Inflammatory bowel disease
Colonic inertia
Pelvic floor dyssynergia
Hirschsprung disease
Ogilvie syndrome
Intestinal pseudo-obstruction

TABLE 4: Differential diagnosis

While the patient declined the necessary workup for the diagnosis of CI and HD, her history and presentation place them high on the differential. A report of four cases of adult HD by Qiu et al. found that these patients presented with chronic constipation and/or intestinal obstruction. They usually have a history of chronic refractory constipation when, in reality, it is mild HD. The diagnosis is not made until a biopsy of the affected colon segment is obtained [13].

Necessary studies would be colonic motility studies and biopsies. Without proper persistent management, this patient will likely develop chronic megacolon resulting from colonic movement abnormalities [14]. This would increase her risk for perforation due to weakened colonic walls, recurrent episodes of obstipation, and chronic fecal soiling. The person will eventually need surgery to remove part of their colon and connect it to the ileum or rectum, or they may need a colostomy [15,16]. However, this was deferred due to the patient's age and the relative success of non-invasive medical therapies. The patient was educated to maintain the bowel regimen and have regular follow-ups with Gastroenterology.

An article by Gamez et al., a case report and literature review, comprised case reports and case series of HD patients [17]. It consisted of a total of 36 HD patients. They commonly present with intestinal obstruction and fecal impaction. All of the cases had surgical intervention with either Duhamel, Saove, Swenson, or Rehbein procedures [17]. The patient in this case report received medical treatment, including endoscopy, per their preferences. Despite it straying from the standard of care, it is important and sometimes forgotten to consider the patient's wishes. She was a young female who wanted to live without an ostomy bag for as long as possible. Upon further literature review, no cases of purely medical management for HD have been reported. This single case shows that the patient is resuming everyday life after a minimally invasive approach and offers a commentary on the current standard of care. Still, the loss of follow-up, with it being a single case, is a limitation. Indeed, removing dilated segments is the ultimate solution. However, if the patient improves in this manner, surgery could potentially be delayed.

Conclusions

This case investigates a unique treatment with a positive outcome of a severe case of colonic inertia. Overall, the standard of care is surgical removal of the dilated segment with multiple biopsies to understand the underlying etiology. However, the patient opted for medical management, which reduced the stool burden and allowed for the resumption of everyday life. This case offered a potential treatment plan for colonic inertia. In the future, further research must be done to examine this conservative measure compared to invasive surgical measures.

Additional Information

Author Contributions

All authors have reviewed the final version to be published and agreed to be accountable for all aspects of the work.

Concept and design: Andrej M. Sodoma, Nicholas J. Knott, James R. Pellegrini, Scarlett Alvarez, Mary Thomas

Acquisition, analysis, or interpretation of data: Andrej M. Sodoma, Nicholas J. Knott, James R. Pellegrini, Scarlett Alvarez, Mary Thomas

Drafting of the manuscript: Andrej M. Sodoma, Nicholas J. Knott, James R. Pellegrini, Scarlett Alvarez,

Mary Thomas

Critical review of the manuscript for important intellectual content: Andrej M. Sodoma, Nicholas J. Knott, James R. Pellegrini, Scarlett Alvarez, Mary Thomas

Supervision: Mary Thomas

Disclosures

Human subjects: Consent for treatment and open access publication was obtained or waived by all participants in this study. **Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

References

1. Chronic constipation. UCLA G. Oppenheimer Center for Neurobiology of Stress and Resilience . (2020). Accessed: September 2, 2020: <https://uclacns.org/patients/disease-information/chronic-constipation/>.
2. Oh SJ, Fuller G, Patel D, et al.: Chronic constipation in the United States: results from a population-based survey assessing healthcare seeking and use of pharmacotherapy. *Am J Gastroenterol.* 2020, 115:895-905. [10.14309/ajg.0000000000000614](https://doi.org/10.14309/ajg.0000000000000614)
3. Higgins PD, Johanson JF: Epidemiology of constipation in North America: a systematic review . *Am J Gastroenterol.* 2004, 99:750-9. [10.1111/j.1572-0241.2004.04114.x](https://doi.org/10.1111/j.1572-0241.2004.04114.x)
4. Varma MG, Wang JY, Berian JR, Patterson TR, McCrea GL, Hart SL: The constipation severity instrument: a validated measure. *Dis Colon Rectum.* 2008, 51:162-72. [10.1007/s10550-007-9140-0](https://doi.org/10.1007/s10550-007-9140-0)
5. Ragg J, McDonald R, Hompes R, Jones OM, Cunningham C, Lindsey I: Isolated colonic inertia is not usually the cause of chronic constipation. *Colorectal Dis.* 2011, 13:1299-302. [10.1111/j.1463-1318.2010.02455.x](https://doi.org/10.1111/j.1463-1318.2010.02455.x)
6. Lembo A, Camilleri M: Chronic constipation. *N Engl J Med.* 2003, 349:1360-8. [10.1056/NEJMra020995](https://doi.org/10.1056/NEJMra020995)
7. Triadafilopoulos G, Gardner JD: Relationship of age and gender to motility test results and symptoms in patients with chronic constipation. *Dig Dis Sci.* 2024, 69:1302-17. [10.1007/s10620-024-08314-y](https://doi.org/10.1007/s10620-024-08314-y)
8. Radenkovic G, Radenkovic D, Velickov A: Development of interstitial cells of Cajal in the human digestive tract as the result of reciprocal induction of mesenchymal and neural crest cells. *J Cell Mol Med.* 2018, 22:778-85. [10.1111/jcmm.13375](https://doi.org/10.1111/jcmm.13375)
9. Gfroerer S, Rolle U: Interstitial cells of Cajal in the normal human gut and in Hirschsprung disease . *Pediatr Surg Int.* 2013, 29:889-97. [10.1007/s00383-013-3364-y](https://doi.org/10.1007/s00383-013-3364-y)
10. Soares AS, Barbosa LE: Colonic inertia: approach and treatment. *J Coloproctol.* 2017, 37:63-71. [10.1016/j.jcol.2016.05.006](https://doi.org/10.1016/j.jcol.2016.05.006)
11. Machchhar RR, Fareen N, Shah V, Vida J: Acute colonic pseudo-obstruction in an elderly female patient with chronic constipation. *Cureus.* 2023, 15:e44789. [10.7759/cureus.44789](https://doi.org/10.7759/cureus.44789)
12. Antonucci A, Fronzoni L, Cogliandro L, et al.: Chronic intestinal pseudo-obstruction . *World J Gastroenterol.* 2008, 14:2953-61. [10.3748/wjg.14.2953](https://doi.org/10.3748/wjg.14.2953)
13. Qiu JF, Shi YJ, Hu L, Fang L, Wang HF, Zhang MC: Adult Hirschsprung's disease: report of four cases . *Int J Clin Exp Pathol.* 2013, 6:1624-30.
14. O'Dwyer RH, Acosta A, Camilleri M, Burton D, Busciglio I, Bharucha AE: Clinical features and colonic motor disturbances in chronic megacolon in adults. *Dig Dis Sci.* 2015, 60:2398-407. [10.1007/s10620-015-3645-5](https://doi.org/10.1007/s10620-015-3645-5)
15. Namikawa T, Ozaki S, Okabayashi T, et al.: Clinical characteristics of the idiopathic perforation of the colon. *J Clin Gastroenterol.* 2011, 45:e82-6. [10.1097/MCG.0b013e31820ca4c2](https://doi.org/10.1097/MCG.0b013e31820ca4c2)
16. Stabile G, Kamm MA, Hawley PR, Lennard-Jones JE: Results of stoma formation for idiopathic megarectum and megacolon. *Int J Colorectal Dis.* 1992, 7:82-4. [10.1007/BF00341291](https://doi.org/10.1007/BF00341291)
17. Gamez C, de Boer TO, Saca N, Umbu L, Shoukry S, Mashburn P, DeVito PM: Adult Hirschsprung's disease: a case report and literature review. *Int J Surg Case Rep.* 2021, 82:105881. [10.1016/j.ijscr.2021.105881](https://doi.org/10.1016/j.ijscr.2021.105881)