The unexpected turn: from tube to table with octreotide in persistent postoperative ileus: a case report

Isaia Maddalena[1]*, Alessandro Viganò[1], Tanja Fusi-Schmidhauser[1,2,3,4]

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ABSTRACT

Background: Octreotide is used for symptom control in malignant bowel obstruction. Its role in non-malignant early postoperative mechanical small-bowel obstruction remains uncertain.

Case Presentation: A 62-year-old woman with severe pre-existing malnutrition underwent laparoscopic descending-colon resection and double-barrel colostomy for perforation with four-quadrant peritonitis. Histology showed ulcerative ischaemic colitis, with nonspecific findings on subsequent review. Serial computed tomography demonstrated mechanical small-bowel obstruction with transition points, distal decompression, and increasing dilatation. The course fluctuated, with intermittent stomal output. Further surgery was considered disproportionate to her frailty and prognosis, and treatment limitations were agreed with the patient and her representative. Continuous IV octreotide, used off-label at 0.9 mg/24 hours from 25 August, was added to multimodal conservative care. Nausea and colicky pain improved within approximately 12 hours. Sustained clinical improvement later permitted cessation of parenteral nutrition on 3 September and removal of the nasogastric tube on 4 September. She was discharged home on 11 September but was readmitted with recurrent obstruction on 28 September and subsequently received end-of-life care at home.

Conclusion: Octreotide initiation was temporally associated with symptom relief in this exceptional patient. Its contribution to restoration of bowel transit cannot be determined from this uncontrolled observation.

Keywords: Octreotide, small-bowel obstruction, postoperative complications, palliative care, case report.

Type of Article: CASE REPORT **Specialty:** Palliative Medicine

Correspondence to: Isaia Maddalena
*Palliative and Supportive Care Clinic, Ospedale Regionale di Bellinzona e Valli, San Giovanni, Ente Ospedaliero Cantonale, Via A. Gallino 12, CH-6500 Bellinzona, Switzerland.
Email: isaia89@gmail.com
Full list of author information is available at the end of the article.

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Background

Early postoperative mechanical small-bowel obstruction may require reoperation, with decisions influenced by the initial procedure, elapsed time, and physiological reserve [1,2]. Octreotide is used for symptom control in malignant bowel obstruction, but evidence in benign postoperative obstruction is limited [3]. We describe its off-label addition to conservative treatment after a shared decision to limit further surgery in a severely frail patient.

Case Presentation

A 62-year-old woman with severe pre-existing protein-energy malnutrition underwent emergency laparoscopic resection of a 25-cm segment of descending colon, abdominal lavage, and formation of a double-barrel colostomy on July 17, 2025, for perforation with four-quadrant peritonitis. Histology showed ulcerative ischemic colitis with fibrinopurulent perivisceritis extending to one resection margin. Subsequent review was nonspecific and could not exclude Crohn disease, which remained unconfirmed. No malignancy was described.

Her postoperative course was complicated by cardiogenic shock with rapid atrial flutter and pulmonary oedema. Left ventricular ejection fraction was 30% on 24 July. Other relevant comorbidities included chronic obstructive pulmonary disease and severe malnutrition, with a Nutritional Risk Screening 2002 score of 6. Bowel function initially returned, and enteral feeding was started before transfer from intensive care to internal medicine.

Over the following weeks, feeding attempts repeatedly provoked abdominal pain or vomiting, with episodes of feculent emesis, marked distension, and reduced colostomy output despite nasogastric decompression. CT on 4 August showed jejunal dilatation to 35 mm, a left mesogastric transition point, ileal kinking, and distal decompression. On 21 August, dilatation had increased to 42 mm, with collapsed distal loops and probable mesogastric transition points (Figure 1). These findings supported

mechanical obstruction. An adhesive or inflammatory cause was plausible after surgery and peritonitis, but was not established. Contrast reached the stoma within six hours on 5 August, and output remained intermittent thereafter, arguing against continuously complete obstruction. The available records did not permit reliable classification as complete or high-grade partial obstruction at each deterioration. Both August CT reports described preserved bowel-wall enhancement, and no free air. Examination on 7 August recorded no peritonism, although the available records did not conclusively exclude all ischaemic or strangulating complications.

Specialist palliative care was integrated into treatment on the medical ward from 30 July, supporting symptom control and discussions about prognosis and the proportionality of further interventions. Her Clinical Frailty Scale score was 8, and by 12 August her Palliative Performance Scale and Barthel Index were 20% and 0/100. In this context of extreme frailty, malnutrition, and cardiac dysfunction, repeated discussions between the medical, surgical, and palliative-care teams concluded that reoperation was unlikely to offer a favorable balance of benefit and burden. The available notes did not specify individual operative alternatives.

On 8 August, the patient and her representative agreed to continued active ward-based treatment, without resuscitation, intensive-care readmission or further surgery in the event of acute deterioration. Care focused on relief of nausea, pain, and distension, while preserving the possibility of oral intake and removal of the nasogastric tube. Palliative care continued alongside decompression and nutritional support throughout the medical admission. Persistent symptom burden led to transfer to the specialist palliative-care unit on 25 August.

Therapeutic Intervention and Outcomes

At transfer, she weighed 32.4 kg at a height of 165 cm (body mass index 11.9 kg/m²). Nausea, colicky pain, and marked distension persisted, with intermittent or markedly reduced stomal output. Nasogastric decompression and parenteral nutrition continued. Drainage was variable and sometimes required manual aspiration.

Continuous IV octreotide was started on 25 August at 0.9 mg/24 hours and maintained through 2 September. The dose and route reflected local palliative-care experience in established, complicated obstruction. This was an empirical, off-label choice, not standard treatment or a validated regimen for benign postoperative mechanical obstruction. Concomitant symptom-directed treatment comprised morphine 20 mg/24 hours, metamizole 3000 mg/24 hours, and haloperidol 2 mg/24 hours, together with IV pantoprazole. Fluid administration was also reduced, and small amounts of oral intake were permitted for comfort.

Within approximately 12 hours, the patient reported substantial improvement in nausea and colicky pain. Nursing observations from 26 August supported improvement in abdominal tension, pain, nausea, and appetite. Distension decreased over the following days. Liquid stool was observed on 29 August, but bowel sounds remained absent and this was considered possible paradoxical evacuation. Sustained stomal output developed over the following days. By 2 September, soft stools, returned bowel sounds, and cessation of nasogastric drainage supported a trial of tube clamping.

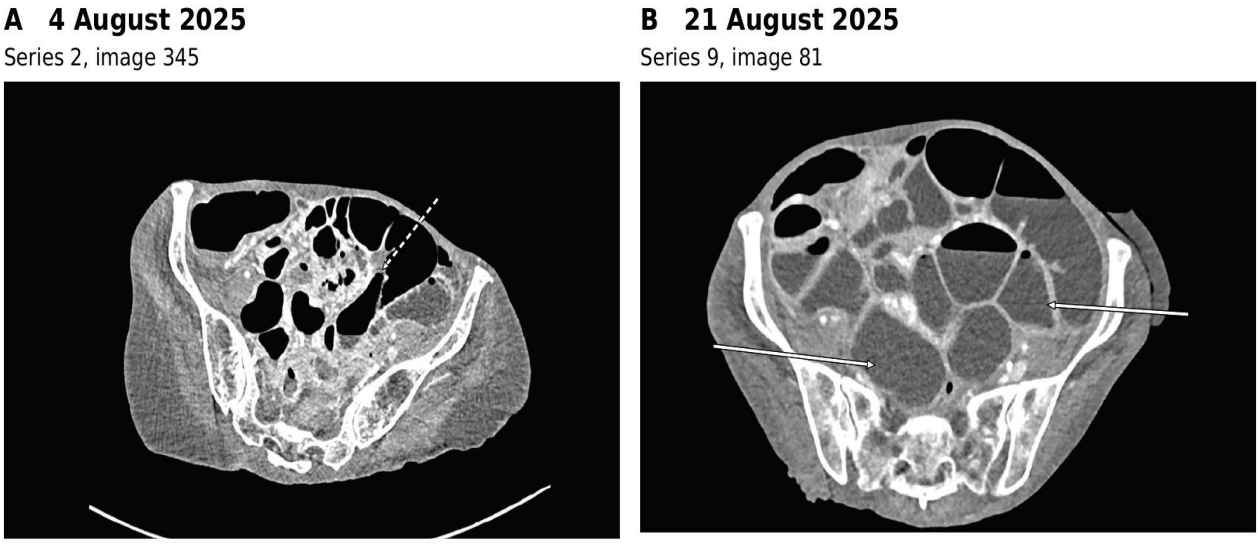


Figure 1. *Serial contrast-enhanced axial CT. (A) 4 August 2025. The dashed white arrow marks the suspected transition site identified by the treating clinician. (B) 21 August 2025. Solid white arrows indicate dilated bowel loops with air–fluid levels. The full CT reports described maximum small-bowel calibres of 35 and 42 mm, respectively, with distal decompression. The probable mesogastric transition points reported on 21 August are not specifically annotated in panel B.*

With continued output and no vomiting during clamp testing, parenteral nutrition was stopped and octreotide reduced to 0.6 mg/24 hours on 3 September. The nasogastric tube was removed and octreotide discontinued the following day. Metoclopramide 20 mg/24 hours was then reintroduced to support motility, while analgesia and antiemetic treatment continued. An earlier trial at 30 mg/24 hours on 20 August had been stopped during recurrent feculent vomiting the next day. Given concerns about prokinetics in complete obstruction [3], the later trial followed sustained output, returned bowel sounds, and tolerated tube clamping. No follow-up CT confirmed anatomical resolution.

Oral intake was progressively re-established over the following days, allowing a change to oral medication on 8 September. The available notes did not explicitly attribute adverse events to octreotide, although systematic glycaemic and cardiac safety-monitoring data were unavailable. She was discharged home on 11 September after 17 days in the palliative-care unit, with ongoing bowel function and adequate oral intake. Her Palliative Performance Scale and Barthel Index had improved to 50% and 30/100. Recurrent obstruction prompted readmission on 28 September, followed by rapid deterioration and subsequent discharge home for end-of-life care. Table 1 summarizes the course.

Discussion

This case highlights the potential value of an individualised, goal-concordant palliative approach for a severely frail patient in whom reoperation was considered disproportionately burdensome. Palliative care was integrated with active management on the medical ward before transfer to the specialist unit. Treatment was guided by proportionality and shared goals, focusing on relief of nausea and pain, restoration of oral intake and, where possible, withdrawal of invasive support. The prolonged conservative course reflected an individual limitation-of-treatment decision rather than usual management of otherwise operable obstruction [1,2].

The rapid improvement in nausea and colicky pain is physiologically plausible. Octreotide reduces gastrointestinal secretions and may decrease the volume accumulating proximal to an obstruction, alleviating distension and discomfort [3]. Its effects on motility are complex, however, and symptom relief should not be equated with mechanical resolution. Here, improvement within approximately 12 hours preceded sustained stomal output and more convincing recovery of transit several days later.

Evidence in non-malignant obstruction remains limited. Trials have evaluated octreotide with water-soluble contrast and somatostatin with dexamethasone, but do not establish the independent effect of octreotide in this setting [4,5]. A previous palliative-care report concerned intermittent treatment-related partial obstruction, a different clinical setting [6]. Although MASCC guidance supports octreotide for vomiting in malignant obstruction [3], octreotide did not improve the primary outcome of days free of vomiting in a placebo-controlled trial [7]. These findings cannot establish efficacy in benign postoperative obstruction, where this treatment is off-label.

The clinical value of this case lies in the relief of distressing symptoms and the subsequent opportunity to

Table 1. Clinical timeline.

DATE IN 2025	CLINICAL EVENTS AND TREATMENT
17 July	Emergency laparoscopic descending-colon resection and double-barrel colostomy for perforation and diffuse peritonitis.
24-30 July	Initial return of bowel function. CT on 25 July did not describe obstruction. Integrated palliative-care assessment on the medical ward on 30 July.
4-5 August	CT showed 35-mm dilatation, a transition point and distal decompression. Gastrografin reached the stoma within 6 hours on 5 August.
8 August	Shared decision to continue active ward care without resuscitation, intensive-care readmission or further surgery in the event of acute deterioration.
20-21 August	Metoclopramide 30 mg/24 hours trial stopped during recurrent vomiting. CT showed 42-mm dilatation, distal collapse and probable transition points.
25-26 August	Transfer to palliative-care unit. Octreotide 0.9 mg/24 hours IV started. Symptom improvement reported at about 12 hours and documented on 26 August.
31 August	Liquid stool with absent bowel sounds, considered possible paradoxical evacuation.
31 August-2 September	Sustained stomal output developed. On 2 September, soft stools, returned bowel sounds, and absent tube drainage allowed clamp testing.
3-4 September	Octreotide reduced to 0.6 mg/24 hours and parenteral nutrition stopped on 3 September. After tolerated clamping, the tube was removed and octreotide stopped on 4 September. Metoclopramide reintroduced at 20 mg/24 hours.
5-8 September	Isolated emesis on 5 September. Oral intake tolerated on 6-7 September, with transition to oral medication on 8 September.
11 September	Discharge home with oral intake and ongoing bowel function.
28 September	Readmission with recurrent obstruction. Subsequent end-of-life care at home.

resume oral intake and return home within an individualized palliative-care plan. Octreotide was one component of this multimodal approach. The single-case design, concurrent treatments, and incomplete quantitative outcome and safety data limit assessment of its independent contribution. Concomitant morphine may have reduced gastrointestinal motility [3]. The temporary recovery of bowel transit may also have reflected decompression, supportive care, and the natural course of postoperative obstruction.

Nevertheless, the temporal association between octreotide initiation and early improvement in nausea and colicky pain provides a clinically relevant observation in a setting where evidence remains limited. This hypothesis-generating observation supports further evaluation of octreotide as a symptom-directed adjunct in selected patients with non-malignant postoperative obstruction when reoperation is considered disproportionately burdensome. Such evaluation should prioritize outcomes meaningful to patients, including comfort, oral intake, and reduced dependence on invasive supportive measures.

Patient perspective

The patient described being able to eat again after a prolonged period of restricted intake as particularly meaningful. This improved her quality of life and her experience of living with illness. The accompanying clinical stabilization also made returning home possible, further contributing to her well-being.

Conclusion

In this patient with early postoperative mechanical small-bowel obstruction, the addition of octreotide to multimodal palliative care was temporally associated with rapid relief of nausea and colicky pain. Subsequent clinical improvement enabled resumption of oral intake, withdrawal of parenteral nutrition and nasogastric decompression, and return home. Although octreotide's contribution to the temporary recovery of bowel transit remains uncertain, this case suggests a potential role for it as a symptom-directed adjunct in selected patients for whom surgery is disproportionately burdensome, within an individualised care plan focused on comfort and quality of life.

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List of Abbreviations

CT	Computed tomography
IV	Intravenous
MASCC	Multinational Association of Supportive Care in Cancer
SBO	Small-bowel obstruction

Conflict of interest

The authors declare that they have no conflict of interest regarding the publication of this case report.

Funding

None.

Consent for publication

Written informed consent was obtained from the patient for publication of this case report and the accompanying image.

Ethical approval

Ethical approval is not required at our institution to publish an anonymous case report.

Data availability

All data relevant to this case are included in the article. Additional clinical data are not publicly available to protect patient confidentiality but may be provided to the journal upon reasonable request, subject to applicable privacy requirements.

Generative AI Disclosure

Generative AI-assisted language editing and manuscript organization during preparation and revision. The authors are responsible for the accuracy and integrity of the report.

Author details

Isaia Maddalena[1], Alessandro Viganò[1,] Tanja Fusi-Schmidhauser[1,2,3,4]

1. Palliative and Supportive Care Clinic, Ospedale Regionale di Bellinzona e Valli, Ente Ospedaliero Cantonale, CH-6500 Bellinzona, Switzerland.
2. Department of Internal Medicine, Ospedale Regionale di Lugano, Ente Ospedaliero Cantonale, CH-6900 Lugano, Switzerland.
3. Faculty of Medicine, University of Geneva, CH-1211 Geneva, Switzerland.
4. Department of Rehabilitation and Geriatrics, University of Geneva, Geneva, Switzerland.

What is new

In a severely frail patient with early postoperative mechanical small-bowel obstruction for whom reoperation was considered disproportionately burdensome, continuous IV octreotide within multimodal palliative care was temporally associated with rapid relief of nausea and colicky pain. Subsequent clinical improvement allowed resumption of oral intake and withdrawal of parenteral nutrition and nasogastric decompression. This case highlights the potential value of symptom-directed treatment within an individualized palliative-care plan, while distinguishing meaningful improvements in quality of life from durable resolution of the underlying obstruction.

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Summary of the case

No.	Field	Case details
1	Patient	62-year-old woman
2	Diagnosis	Early postoperative mechanical small-bowel obstruction with a fluctuating course after laparoscopic descending-colon resection.
3	Symptoms	Nausea, feculent vomiting, distension, colicky pain, and intermittent or markedly reduced stomal output.
4	Medication	Octreotide 0.9 then 0.6 mg/24 hours IV, with analgesia and antiemetics. Metoclopramide reintroduced after clinical improvement.
5	Procedure	Laparoscopic colonic resection and double-barrel colostomy, followed by conservative care with integrated palliative support, decompression, and nutrition.
6	Specialty	Palliative Medicine