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Evaluation and Management of Rectal Prolapse Among Geriatric Patients

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ABSTRACT
Evaluation and management of older adults within emergency care settings is often complex and has the potential for avoidable complications. In an effort to prevent harm to the patient, treatment strategies need to be multifactorial. For geriatric patients presenting with rectal prolapse, unique management strategies, including the use of granulated sugar and gentle pressure, may assist in the reduction of the prolapsed tissue. Additional interventions that are important to incorporate into the older adult's plan of care include gentle approaches to positioning, involvement of family/caregivers, avoiding harmful medications, reducing risk for delirium, and a successful transition of care. A manual reduction completed in the emergency department can relieve discomfort and prevent further complications while the patient awaits surgical evaluation and intervention. Prompt evaluation and management by the advanced practice registered nurse may not only expedite recognition of the prolapse, but can reduce iatrogenic complications that may occur from delayed treatment.
Key words: emergency care, older adult, rectal prolapse

AN 87-YEAR-OLD WOMAN presents to the emergency department from a long-term care facility with report of a rectal prolapse. She has a medical history significant for dementia, hypertension, and hypothyroidism. There is no family present at the time of her transfer and information from the facility is limited. Her Delirium Triage Screen is positive, along with her Brief Confusion Assessment Method. Her risk factors for delirium are multifactorial including dementia, age, transferring from a facility, and pain. A history and review of systems is limited due to her mental status. Her physical examination is consistent with rectal prolapse with observation of concentric folds of prolapsed rectal tissue. Her physical examination is otherwise without acute concerns and she is hemodynamically stable.

INTRODUCTION

Rectal prolapse occurs in the general population at a fairly low rate of 0.5% (Kairaluoma & Kellokumpo, 2005). The occurrence of rectal prolapse increases beginning at age 50 and continues to increase with a peak in the seventh decade (Kairaluoma & Kellokumpo,

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2005). Rectal prolapse is nine times more likely in women than in men, and in women it commonly co-occurs with pelvic floor weakness and/or prolapse (Cannon, 2017). While benign, rectal prolapse can have significant impact on quality of life due to discomfort and drainage from the rectum (Bordeianou et al., 2017). In individuals with rectal prolapse, 50%–75% will have fecal incontinence that can have a significant impact on quality of life (Bordeianou et al., 2017). Due to the fecal incontinence, individuals suffering from rectal prolapse often have to make adjustments to their lifestyle that can lead to isolation and reduced occurrences to seek out routine health care (Kairaluoma & Kellokumpo, 2005). In addition, constipation is both a result of and a risk factor for rectal prolapse because of chronic straining and outlet blockage constipation (Bordeianou et al., 2017).

Pathophysiology

Rectal prolapse is a full-thickness protrusion of the rectum through the anus. There are two stages of rectal tissue changes that can occur prior to rectal prolapse, and those include internal intussusception (only visible on imaging) and external mucosal prolapse (Bordeianou et al., 2017). Differential diagnoses for rectal prolapse include prolapsed internal hemorrhoids, rectal mucosal prolapse, and solitary rectal ulcer (Felt-Bersman, Tiersma, & Cuesta, 2008). Co-occurrence of pelvic organ dysfunction can also exist, including rectocele, prolapse, cystocele, or enterocele (Bordeianou et al., 2017). The pelvic floor is complex with both superficial and deep muscle layers, and, due to this complexity, the anatomy of rectal prolapse can vary (Bordeianou et al., 2017). There are four anatomic abnormalities that are most common, which include a redundant sigmoid colon, diastasis of the levator ani, loss of the vertical position of the rectum, and/or an abnormally deep cul-de-sac (Bordeianou et al., 2017). The key examination finding for complete rectal prolapse is concentric rings of exposed rectal mucosa (Bordeianou et al., 2017). Within the emergency setting, the patient will likely present with a current rectal prolapse rather than one that has already returned to the rectal vault. The patient may have associated symptoms of constipation, mucous diarrhea, fecal incontinence, rectal bleeding, urinary incontinence, vaginal vault prolapse, pain, and decreased quality of life (Bordeianou et al., 2008; Varma, Rafferty, & Buie, 2011).

Management

The Geriatric Emergency Department Guidelines from the American Geriatric Society (2014) provide emergency clinicians with evidence-based tools to reduce harm to the patient during their emergency department evaluation and management. Although they do not specifically outline management of rectal prolapse, the guidelines support holistic management of older adults with rectal prolapse. Considerations should be made for positioning of the patient, addition of medications, and management of comorbidities during the procedure. Additionally, comprehensive management strategies should be in place to avoid iatrogenic insults throughout the acute care stay.

Effective management of rectal prolapse requires a prompt (as soon as available) surgical consult for all patients presenting with rectal prolapse, but availability may be limited in urgent situations and in low-resource facilities. If incarcerated or strangulated tissue is present, an emergent surgical evaluation is warranted. Further studies requiring additional time may also be needed for complicated or unclear cases, including colonoscopy, defecography, transit studies, and anal manometry (Cannon, 2017). Immediate surgical intervention may not be appropriate or available, and therefore manual reduction of the prolapsed rectal tissue may be necessary to prevent complications.

When manual reduction is needed in an older, frail patient, the clinician should take into account the increased risk for

injury and/or iatrogenic complications (pressure injuries, delirium, adverse drug reaction, fall, and infection). Delirium is a significant risk for all older adults receiving emergency care and is one of the complications that are covered comprehensively in the Geriatric Emergency Department Guidelines (American Geriatric Society, 2014). In the aforementioned case scenario, the patient had a positive screening for delirium (Delirium Triage Screen) and subsequent diagnoses of delirium via the Brief Confusion Assessment Method. Delirium is not uncommon for older adults presenting to the emergency department; in addition, it is costly, underrecognized, and potentially fatal (Lee et al., 2020). Further evaluation and management of delirium should be included in the plan of care of a patient with delirium.

A manual reduction of the prolapse tissue should include the intervention itself as well as maintaining comfort and preventing any additional injury to the patient. Although there is not an evidence-based guideline for manual reduction, there are case reports supporting the use of sucrose and light pressure to reduce the prolapse (Coburn, Russell, & Hofstetter, 1997; Myers & Rothenberger, 1991). The first attempt should be completed without table sugar and the clinician should be prepared to intervene with table sugar if this fails. The desiccating properties of the table sugar reduce the inflammation of the prolapsed rectal tissue allowing for the reduction of the tissue with light pressure (Coburn et al., 1997). Complications from manual reduction are not extensively reported; however, it is clear that there is significant risk for complications if prolapse is not addressed (Bordeianou et al., 2013).

Procedure

The entire procedure is summarized in Table 1. Pain medication should be provided at the lowest dose that will be effective in controlling any discomfort the patient may be experiencing. Appropriate initial pain medication selection for moderate pain in an older adult patient would be tramadol 25 mg PO every 4–6 hr PRN (*pro re nata*) if not contraindicated (Reuben et al., 2021). If an intravenous (IV) route is indicated a starting dose for morphine IV would be 1 mg every 3–4 hr PRN (Reuben et al., 2021). The older adult patient should be positioned in a lateral recumbent position while maintaining their comfort. The head of their bed may need to be elevated and multiple pillows may need to be used to ensure comfort and avoid any pressure injuries. If available, and especially in patients with cognitive impairment, the clinician should request a family member to offer support to the patient during the procedure and throughout the stay.

Table 1. Procedural steps for reduction of rectal prolapse in the older adult

Step	Provider action
1.	Provide analgesia.
2.	Position the patient in lateral recumbent as able.
3.	Apply granulated (table) sugar.
4.	Manually reduce prolapsed tissue with gentle pressure.
5.	Observe patient.
6.	Educate patient/family/care team.

Once the patient is comfortable and there is adequate staff and/or family support present, gentle manual pressure should be applied. If this pressure does not result in easily reducing the prolapsed tissue, the clinician should apply a generous amount of granulated sugar (enough to cover the prolapsed tissue in its entirety) topically to the prolapsed rectal tissue. As the sugar is absorbed over 15 min to an hour, the tissue inflammation will decrease, and pressure can be applied manually toward the rectal vault to reduce the prolapsed tissue back into the rectal vault. If the tissue remains prolapsed and a reduction is not successful, emergency surgical intervention is indicated (Cannon, 2017). Serum glucose levels should be monitored during this time along with special attention to individuals with a history of hyperglycemia.

Once the prolapse has been reduced, the patient should be monitored to ensure the tissue remains in the rectal vault. The length of time necessary to monitor the patient may vary based on the patient and practice setting. Ideally, prior to discharge, the patient would return to their previous mental status, be eating and drinking, have bowel activity, and have a bowel movement without return of the prolapse. During the immediate recovery period, the patient should be monitored for new onset of pain, return of prolapse, and hemodynamic instability. The patient should be educated to avoid bearing down to defecate, as this can cause a recurrence of the prolapse. Constipation should be addressed, and prophylactic medications should be used to ensure that stool is soft and able to pass with ease (Bordeianou et al., 2017; Gachabayov et al., 2021). A high-fiber diet (30 g daily) and sufficient fluid intake (2 L daily) should be recommended in addition to wearing supportive well-fitting briefs and pads (Bordeianou et al., 2013; Gachabayov et al., 2021). Appropriate follow-up should include evaluation for surgical intervention and prompt notification if prolapse continues. If a patient, due to chronic illness and significant frailty, is not a surgical candidate, education to care providers should be provided on how to prevent recurrent prolapse. This, for example, could be helpful if they reside in a nursing facility and are having recurrent escalation of care. In some cases it may be determined to manage conservatively and the caregivers of patients can be educated on this management. This would, however, be determined after the patient has been evaluated for surgical intervention. Finally, an adequate transition of care should occur no matter the disposition of the patient and should include diet modifications, aggressive management of constipation, and monitoring for return of symptoms.

Case Conclusion

In the case presented earlier, a manual reduction of the rectal prolapse was successful with the aid of granulated sugar and light pressure. The patient tolerated the procedure well and was monitored for 12 hr prior to returning to her long-term care facility. During that time, she was able to defecate and did not have return of the rectal prolapse. Her mental status returned to her baseline, and she had a follow-up appointment scheduled with surgery 3 days after discharge. Her transition of care back to her long-term care facility included a thorough discharge summary and a completed medication reconciliation. The details of her follow-up care were provided to her long-term care facility.

CONCLUSION

Rectal prolapse is a medical condition associated with significant discomfort and requires prompt intervention to prevent complications. Often the patient presenting with this diagnosis is frail and elderly with multimorbidity. Developing a treatment plan with interventions that avoid harm in these patients while also addressing the issues is challenging yet crucial. The emergency nurse practitioner should be mindful that prompt evaluation is warranted, and the approach should avoid further injury or iatrogenic events during the emergency department stay.

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