

CLINICAL VIGNETTE

Patient Engagement in an Older Adult with Sigmoid Volvulus

Natasha Harrison, MD, Elham Ghadishah, MD and Malwinder Multani, MD

Case Presentation

The patient is a 75-year-old frail male veteran in a long-term care (LTC) facility. His medical conditions include Myelopathy with severe cervical stenosis at C2-C5 status post laminectomy, peripheral neuropathy with upper and bilateral lower extremity weakness, optic neuropathy, major depressive disorder, hypertension, diabetes mellitus type 2, benign prostatic hyperplasia with urinary incontinence, osteoarthritis and major neurocognitive disorder. He has been medically stable for four years in the LTC facility without any hospitalizations. He developed acute abdominal pain with abdominal distension. He had not had a bowel movement since the day prior. He was transferred to the Emergency Department (ED) and his abdominal x-ray was negative for free air however his CT abdomen demonstrated a sigmoid volvulus. An emergent sigmoidoscopic decompression with detorsion of three areas was performed. The procedure revealed mucosal ischemic changes, and several liters of fluid were removed during the procedure.

Repeat CT abdomen showed resolution of the sigmoid volvulus and 10 cm of wall thickening in the sigmoid colon. The hospitalization was complicated by sepsis urinary tract infection, and aspiration pneumonia. General Surgery was consulted and did not recommend urgent surgical intervention.

Three months later, the patient complained of sharp abdominal pain again. He was transferred to the ED where his abdominal x-ray showed findings consistent with recurrent sigmoid volvulus. He had another flexible sigmoidoscopy with placement of rectal tube. General Surgery consultants recommended sigmoid colectomy with end colostomy. However, the patient was hesitant to proceed and the primary inpatient medical team was unable to reach his son, as a surrogate decision maker for a more detailed discussion of the surgical intervention. The patient was discharged back to the LTC facility after resolution of his abdominal symptoms and he was followed by General Surgery in the outpatient setting. The family was not present for the surgical clinic appointment and the surgeons questioned the patient's capacity for medical decision making. The patient consistently expressed that he did not want a permanent colostomy which, the surgeons recommended as the definitive treatment.

The patient was re-hospitalized with recurrent symptoms due to his sigmoid volvulus. His son was unable to convince the

patient to have surgery and believed that his father had the capacity to say "yes or no" to surgery. One month later, the patient again presented with abdominal pain and distention with decreased output from the rectal tube. He opted again for decompression of the sigmoid colon and rectal tube placement. Psychiatry was consulted and he was deemed to lack capacity for medical decision making. General Surgery discussed with the patient's son that the best management option for his father's recurrent sigmoid volvulus is surgery and the son agreed to proceed with the Hartmann's surgical procedure for sigmoid volvulus. The patient had a successful procedure and there were no further recurrences of sigmoid volvulus. His other chronic conditions remain stable and well-controlled.

Discussion

What happens at the intersection of patient-centered care with major neurocognitive disorder? Who determines medical decision making capacity - physician or family? This case explores the hospital course of a resident from a long-term care facility with recurrent sigmoid volvulus. Although, shared decision-making and respect for patient engagement were pursued, the patient had multiple re-admissions for the same medical condition. His quality of life was affected during these four hospitalizations, and the use of resources was another factor when balancing the benefits and burdens of patient-centered care in this case.

The literature has shown that patient-centered care has better outcomes along with increased patient satisfaction.¹ Patient-centered care is defined as care that is aligned with a patient's beliefs and needs and this occurs when clinicians involve patients in their own healthcare discussions and decisions.² In 2001, the Institute of Medicine advised reforms for achieving a patient-centered healthcare system in the report *Crossing the Quality Chasm*.³

There have been concerns that patient-centered care may be inconsistent with evidence-based care. With the emphasis on patient engagement, a person's choices may be more consistent with patients personal characteristics rather than the best treatment. Drager and Stern suggested incorporating patient preferences into clinical trials to focus on reproducible measurements of patient-centered care and the relationship to outcomes.⁴

In this case the patient's diagnosis and optimum management conflicted with the patient's preferences. Sigmoid volvulus is one of the most common causes of large bowel obstruction in older adults with dementia or other psychiatric illness⁵ along with colorectal cancer and complicated sigmoid diverticulitis.⁶ Although the patient did not present with any of the common risk factors such as chronic constipation, frequent laxative use, neurological disease, history of high fiber diet or prior history of abdominal surgery he was re-hospitalized three times.⁷ The reoccurrence of the sigmoid volvulus was quite distressing to the patient and caused a burden on the health care system. Large bowel resection is the "gold standard" of treatment for recurrent sigmoid volvulus and has a mortality risk of 7%.⁸ This case was typical with high risk of recurrence after endoscopic decompression. Reoccurrence rates of 40-70% are reported with conservative treatment.⁷

Shared decision-making is a method when clinicians and patients make decisions together using the best evidence and treatment options available that are consistent with the patient's values and goals. There are three pertinent steps in this process: (1) Explain the need to consider alternatives, (2) Describe the alternatives in detail and (3) Help patients explore and form personal preferences.¹ Ganzini's Ten Myths About Decision-Making Capacity noted that cognitive impairment does not equal lack of decision-making capacity and not all patients with psychiatric disorders lack capacity. Most importantly, mental health experts are not the only clinicians/specialists who can assess decision-making capacity. Lack of decision-making capacity was not presumed when the patient decided against medical advice.⁹

Patient-centered care has five main components including shared decision-making, understanding biopsychosocial issues, the patient as a person, the therapeutic alliance and the doctor as a person.⁴ As in our case, the patient's multiple medical problems have or will affect his decisions and his perspective on life. Since he resides in a long-term care facility, he has less control of his situational choices versus someone who lives independently. In this case, evidence-based choice was likely deferred due to respect for autonomy in medical decision-making. Autonomy is present when a person makes a decision on accurate information (i.e. standards of care, guidelines), choices are voluntary and based on reasoning.⁹ Most medical guidelines do not incorporate patient preferences; therefore, required the treating clinician to infer.¹⁰ In the above case, the guidelines are clear on advantages and disadvantages on the management of a sigmoid volvulus.

Ethical or mental health consultations should be considered when there is conflict within the medical team and or surrogate decision-maker about a patient's decision-making capacity. The patient had some identifiable behaviors that indicated that he lacked capacity such as not recognizing the treatment as a legitimate option after being given the risks and benefits of the treatment.¹¹

Besides psychiatric consultation, several tools exist to assess decision-making capacity including the MacArthur Competence Assessment Tool for Treatment (MacCAT-T), Hopkins

Competency Assessment Test (HCAT).¹² The MacCAT-T is an interview with the patient regarding the illness, recommended treatments, benefits and risk; and the physician assessment of the patient's understanding. In contrast, the patient is required to read an essay with the HCAT not related to their disease process then is required to answer a six-question quiz. Mini Mental State Examination (MMSE) scores less than 20 increase the likelihood that a person lacks capacity whereas scores from 20-24 had no effect on the likelihood of incapacity and scores above 24 lowered the likelihood of incapacity.¹³

The patient's family engagement is significant in this case. A lesson learned from this case is cultivating early communication with the healthcare proxy of a patient with major neuro-cognitive disorder. Early engagement and in-depth discussions of management options with the healthcare proxy could have prevented the re-admissions of the patient for his recurrent sigmoid volvulus. Balancing patient engagement and evidence-based care can be challenging and enhancing communication with the patient's healthcare proxy could have improved the patient's quality of life.

REFERENCES

1. **Elwyn G, Dehlendorf C, Epstein RM, Marrin K, White J, Frosch DL.** Shared decision making and motivational interviewing: achieving patient-centered care across the spectrum of health care problems. *Ann Fam Med.* 2014 May-Jun;12(3):270-5. doi: 10.1370/afm.1615. Erratum in: *Ann Fam Med.* 2014 Jul-Aug;12(4):301. PubMed PMID: 24821899; PubMed Central PMCID: PMC4018376.
2. **Constand MK, MacDermid JC, Dal Bello-Haas V, Law M.** Scoping review of patient-centered care approaches in healthcare. *BMC Health Serv Res.* 2014 Jun 19;14:271. doi: 10.1186/1472-6963-14-271. Review. PubMed PMID: 24947822; PubMed Central PMCID: PMC4079171.
3. **Bloomrosen M, Sennett C.** Patient engagement: challenges and opportunities for physicians. *Ann Allergy Asthma Immunol.* 2015 Dec;115(6):459-62. doi:10.1016/j.ana.2015.09.005. Epub 2015 Oct 6. PubMed PMID: 2645 2323.
4. **Draeger RW, Stern PJ.** Patient-centered care in medicine and surgery: guidelines for achieving patient-centered subspecialty care. *Hand Clin.* 2014 Aug;30(3):353-9, vii. doi: 10.1016/j.hcl.2014.04.006. Epub 2014 May 28. Review. PubMed PMID: 25066854.
5. **Safioleas M, Chatziconstantinou C, Felekouras E, Stamatikos M, Papaconstantinou I, Smirnis A, Safioleas P, Kostakis A.** Clinical considerations and therapeutic strategy for sigmoid volvulus in the elderly: a study of 33 cases. *World J Gastroenterol.* 2007 Feb 14;13(6):921-4. Review. PubMed PMID:17352024; Pub Med Central PMCID: PMC4065930.
6. **Perrot L, Fohlen A, Alves A, Lubrano J.** Management of the colonic volvulus in 2016. *J Visc Surg.* 2016 Jun; 153 (3):183-92. doi: 10.1016/j.jviscsurg.2016.03.006. Epub 2016 Apr 28. Review. PubMed PMID: 27132752.
7. **Ifversen AK, Kjaer DW.** More patients should undergo surgery after sigmoid volvulus. *World J Gastroenterol.* 2014 Dec 28;20(48):18384-9. doi:10.3748/wjg.v20.i4.8.

18384. PubMed PMID: 25561806; PubMed Central PMCID:PMC4277976.

8. **Frank L, Moran A, Beaton C.** Use of percutaneous endoscopic colostomy (PEC) to treat sigmoid volvulus: a systematic review. *Endosc Int Open.* 2016 Jul;4(7):E737-41. doi: 10.1055/s-0042-106957. Epub 2016 Jun 29. Review. PubMed PMID: 27556086; PubMed Central PMCID: PMC4993950.
9. **Ganzini L, Volicer L, Nelson WA, Fox E, Derse AR.** Ten myths about decision-making capacity. *J Am Med Dir Assoc.* 2005 May-Jun;6(3 Suppl):S100-4. PubMed PMID: 15890283.
10. **Hoffmann TC, Montori VM, Del Mar C.** The connection between evidence-based medicine and shared decision making. *JAMA.* 2014 Oct 1;312(13):1295-6. doi:10.1001/jama.2014.10186. PubMed PMID: 25268434.
11. **Mitchell MA.** Assessing Patient Decision-Making Capacity: It's About the Thought Process. *J Emerg Nurs.* 2015 Jul;41(4):307-12. doi:10.1016/j.jen.2014.10.014. Epub 2015 Jan 10. Review. PubMed PMID: 25583426.
12. **Chow GV, Czarny MJ, Hughes MT, Carrese JA.** CURVES: a mnemonic for determining medical decision-making capacity and providing emergency treatment in the acute setting. *Chest.* 2010 Feb;137(2):421-7. doi: 10.1378/chest.09-1133. PubMed PMID:20133288.
13. **Sessums LL, Zembrzuska H, Jackson JL.** Does this patient have medical decision-making capacity? *JAMA.* 2011 Jul 27;306(4):420-7. doi:10.1001/jama.2011.1023. Review. PubMed PMID: 21791691.

Submitted May 24, 2018