## EDITORIAL - COLORECTAL CANCER

## It is not "If" but "How" Preoperative Frailty Assessment Should be Provided

Beatriz Korc-Grodzicki, MD, PhD, FAGS

Memorial Sloan-Kettering Cancer Center, Weill Cornell Medical College, New York

Several years ago, Paula Span, a writer for the New York Times, published an article titled "One Last Question Before the Operation: Just How Frail Are You?" aimed at creating public awareness of the importance of frailty assessment in the older patient who is going to have a surgical procedure. The same author, a couple of years later, once again wrote about the crucial need to assess older adults for frailty even if they were going for minor operations, and become cognizant of the potential struggles that an older adult could face. Ms. Span touched on a very significant subject: the patient-centered care of the surgical frail older adult. A landmark publication in JAMA Surgery looking at 30- and 90-day mortality of 2.7 million surgical patients concluded that frailty was "associated with postoperative mortality across all non-cardiac surgical specialties regardless of case mix."3

Older adults comprise a large portion of the surgical population. One-third of people having surgery are at least 75 years old and this proportion is increasing. Older people having surgery are more likely to experience post-operative complications than younger people. This includes longer hospital stays, increased risk of being discharged with additional care, and incurring higher health and social care costs. The role of the surgeon is usually focused on the surgical procedure and perioperative care. However, for older adults, other parameters such as quality of life, maintenance of independence, cognitive decline, and return to the preoperative level of functioning have gained

importance. Older adults may prioritize quality over quantity of life when making health-care decisions and, in addition to surgical outcomes data, the burden of treatment requires explicit consideration.<sup>6</sup>

An article in this issue of the Annals of Surgical Oncology<sup>7</sup> provided much-needed data, addressing a question most frail, older adults and/or their caregivers have: Are the risks of surgery worth their benefits, shortterm and long-term? In this retrospective study, Dr. Abdelfatah et al. looked at the effect of frailty on colorectal surgery postoperative outcomes, short-term survival (30and 90-day mortality and complications rate) and longterm (0–110 months, median = 30 months) recurrence, overall survival (OS), disease-specific survival (DSS), and recurrence free survival (RFS). A total of 411 patients with mean age 75.1 years (SD = 6.6 years) undergoing mostly elective surgery (97.8%) for colorectal cancer were included. Frailty, present in 129 (29.9%) of patients, and complication rates were determined for the most part, using data collected by the National Surgical Quality Improve-Program (NSQUIP). Preoperative cognitive impairment as well as postoperative delirium information were queried from the medical record. Information on long-term outcomes was obtained from the author's institutional cancer registry and chart review. Analysis of the data showed no significant 30- and 90-day mortality when comparing frail versus non-frail patients, but there was a positive correlation between frailty in the preoperative period and hospital length of stay (> 30 days), discharge to rehabilitation facilities, and postoperative complications such as wound complications and postoperative delirium. Long-term outcomes were analyzed for those patients with adenocarcinoma undergoing curative-intent procedures (318 patients). Frailty showed a significant association with OS in patients with stage 0 and 1 (no association in stages  $\geq 2$ ) and was not associated with DSS or RFS.

© Society of Surgical Oncology 2022

First Received: 7 December 2022 Accepted: 12 December 2022 Published Online: 30 December 2022 B. Korc-Grodzicki, MD, PhD, FAGS

e-mail: korcgrob@mskcc.org

Frailty did not impact 30- or 90-day mortality and did not impact long-term surgical outcomes in patients with later colorectal cancer stages. These findings confirmed that not only should chronological age be a determinant to offer surgery with curative intent, but, if surgery is determined to be the appropriate treatment modality, frail patients should not be denied this option. However, frailty is a major contributor to surgical complications. A holistic preoperative evaluation of older adults calculating frailty to be aware of the specific contributors to their status is a must. Ideally, surgical teams should be prepared to act on the findings before surgery (with measures such as prehabilitation) and should pay attention to potentially preventable, devastating complications (such as delirium) during the postoperative period.<sup>8</sup> Dr. Saur et al. and the American Society of Colon and Rectal Surgeons published guidelines for the perioperative evaluation and management of the frail older adult that includes frailty screening and development of a treatment plan that aligns with patient's goals of care based on realistic outcomes.9 Shahrokni et al. showed that addressing geriatric syndromes through surgery-geriatrics co-management in the postoperative period for inpatient cancer surgeries was associated with a statistically significant reduction in 90-day postoperative mortality in patients > 75 years. 10 The benefits of interdisciplinary care of this patient population and the promotion of patient and family-centered care has been extensively discussed and published and led to the development of the Geriatric Surgery Verification program by the American College of Surgeons. 11 Interestingly, in the study by Abdelfatah et al. the American Society of Anesthesiologists (ASA) classification was not a good marker of frailty and showed no significant relationship with complication rate supporting frailty assessment as a better indicator. These findings confirmed once again that ASA does not have good prognostic value. It was previously shown that while the number of geriatric assessment deficits was strongly associated with 6-month mortality, ASA classification was not.<sup>12</sup>

Frailty assessment is paramount for most surgical specialties and procedure types. In addition to a detailed recount of potential perioperative risks, the risk of all-cause mortality and potential functional and/or cognitive post-operative changes should inform the shared decision-making process. Long-term surgical outcomes, OS, DSS, and RFS provide crucial information, but it should also be accompanied by data on long-term QOL and other outcomes that matter to patients.<sup>13</sup> A recent publication showed that factors most often associated with surgical decision regret included type of surgery, disease-specific quality of life, and shared decision-making.<sup>14</sup>

The time has come not to ask the question "if" presurgical frailty assessment should be done but "how" it can be done swiftly and effectively, with the resources available to each institution and to the community surgeon. There are multiple options described in the literature: in person versus electronic, time-consuming versus short minimal screening, self-reported versus clinician driven. None are perfect or described as gold standard, but all of them imply patient-centered care, informed shared decision-making, and provision of realistic expectations to patients and caregivers. Each practitioner should look into their own box of resources and provide some form of frailty assessment. Every clinician during an initial consultation can ask the question: "Just How Frail are You?" 1

**DISCLOSURE** The author declares no conflicts of interest.

## REFERENCES

- 1. https://www.nytimes.com/2017/10/27/health/elderly-surgery-frail ty.html?searchResultPosition=1
- https://www.nytimes.com/2019/12/13/health/frail-elderly-surger y.html?searchResultPosition=1
- George EL, Hall DE, Youk A, Chen R, Kashikar A, Trickey AW, et al. Association between patient frailty and postoperative mortality across multiple noncardiac surgical specialties. *JAMA Surg.* 2021;156(1):e205152. https://doi.org/10.1001/jamasurg.20 20.5152.
- Fowler AJ, Abbott TEF, Prowle J, Pearse RM. Age of patients undergoing surgery. Br J Surg. 2019;106(8):1012–8. https://doi. org/10.1002/bjs.11148.
- Miller RL, Barnes JD, Mouton R, Braude P, Hinchliffe R. Comprehensive geriatric assessment (CGA) in perioperative care: a systematic review of a complex intervention. *BMJ Open*. 2022;12(10):e062729. https://doi.org/10.1136/bmjopen-2022-062729.
- Fried TR, Bradley EH, Towle VR, Allore H. Understanding the treatment preferences of seriously ill patients. N Engl J Med. 2002;346(14):1061–6. https://doi.org/10.1056/NEJMsa012528.
- Abdelfatah E, Ramos-Santillan V, Cherkassky L, Cianchetti K, Mann G. High risk, high reward: frailty in colorectal cancer surgery is associated with worse postoperative outcomes but equivalent long-term oncologic outcomes. *Ann Surg Oncol*. 2022. https://doi.org/10.1245/s10434-022-12970-7.
- Janssen TL, Alberts AR, Hooft L, Mattace-Raso F, Mosk CA, van der Laan L. Prevention of postoperative delirium in elderly patients planned for elective surgery: systematic review and meta-analysis. *Clin Interv Aging*. 2019;14:1095–117. https://doi. org/10.2147/CIA.S201323.
- Saur NM, Montroni I, Shahrokni A, Kunitake H, Potenti FM, Goodacre RC, et al. Care of the geriatric colorectal surgical patient and framework for creating a geriatric program: a compendium from the 2019 American Society of Colon and Rectal Surgeons Annual Meeting. Dis Colon Rectum. 2020;63(11):1489–95. https://doi.org/10.1097/DCR. 00000000000001793.
- Shahrokni A, Tin AL, Sarraf S, Alexander K, Sun S, Kim SJ, et al. Association of geriatric comanagement and 90-day postoperative mortality among patients aged 75 years and older with cancer. *JAMA Netw Open*. 2020;3(8):e209265. https://doi.org/10. 1001/jamanetworkopen.2020.9265.

It is not "If" but... 1937

 Berian JR, Rosenthal RA, Baker TL, et al. Hospital standards to promote optimal surgical care of the older adult: a report from the coalition for quality in geriatric surgery. *Ann Surg*. 2018;267(2):280–90.

- 12. Shahrokni A, Vishnevsky BM, Jang B, Sarraf S, Alexander K, Kim SJ, et al. Geriatric assessment, not ASA physical status, is associated with 6-month postoperative survival in patients with cancer aged ≥75 years. *J Natl Compr Cancer Netw.* 2019;17(6):687–94. https://doi.org/10.6004/jnccn.2018.7277.
- Montroni I, Ugolini G, Saur NM, Rostoft S, Spinelli A, Van Leeuwen BL, SIOG Surgical Task Force/ESSO GOSAFE Study Group, et al. Quality of life in older adults after major cancer
- surgery: the gosafe international study. *J Natl Cancer Inst.* 2022;114(7):969–78. https://doi.org/10.1093/jnci/djac071.
- Wilson A, Ronnekleiv-Kelly SM, Pawlik TM. Regret in surgical decision making: a systematic review of patient and physician perspectives. World J Surg. 2017;41(6):1454–65. https://doi.org/ 10.1007/s00268-017-3895-9.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.