

Invited Commentary

Moving Toward Every Patient Training for Surgery

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Prehabilitation aims to enhance functional status before surgery. Through multimodal approaches, including structured exercise, nutritional counseling, and patient empowerment, prehabilitation programs can improve the patient's preoperative functional status, reduce postoperative complications and length of stay, and lower costs of care.¹⁻⁵

In this issue of *JAMA Surgery*, Minnella and coauthors⁶ report their findings from a randomized clinical trial analyzing 51 patients undergoing esophagogastric cancer resection. Prehabilitation was associated with improved preoperative and



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postoperative functional capacity. One notable limitation of their trial is that frail and at-risk patients were excluded. While exclusion was done to facilitate rigor of the trial, frail and at-risk patients are the patients for whom surgical care carries the greatest risk and presumably who may benefit the most. Furthermore, like most prehabilitation clinical trials, this study was not powered to detect improvements in traditional surgical outcomes, such as complication rates, length of stay, or readmissions.

This group at McGill University Health Centre (Montreal, Quebec, Canada) leads the scientific investigation of prehabilitation and has convinced many clinicians that prehabilitation benefits patients. Their present trial demonstrates that a prehabilitation program can mitigate the expected func-

tional decline from comprehensive esophagogastric cancer care.⁶ Unfortunately, the rigorous science translates poorly into the clinical realities of day-to-day care. In other words, patients are not randomized in standard practice, and physicians may intuitively prescribe prehabilitation for those patients whom they believe stand to benefit the most. In addition, it is often unrealistic to delay a patient's medical care to undergo a prehabilitation program, especially for patients with time-sensitive, surgically amenable conditions. Diverse patients, diverse stakeholders, and diverse financing strategies contribute to a complex milieu for care and impede the acceptance and implementation of prehabilitation. More pragmatic, population-based studies of prehabilitation are essential to prove its effect and drive care transformation.

As the science behind prehabilitation moves forward, it is also imperative to prove the business case for prehabilitation to surgeons, payers, and hospitals. A strong business case will jump-start widespread implementation and facilitate multi-institutional collaboration to further advance the nuanced science behind prehabilitation.

The evidence demonstrates that, at worst, prehabilitation does no harm, and it can be a transformative clinical pathway to facilitate a better life for some patients. Over the next decade, more excellent research, such as this study by Minnella and coauthors,⁶ will convince us that every patient should train for surgery.

ARTICLE INFORMATION

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