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Improving outcomes in geriatric surgery: Is there more to the equation?

Serene Si Ning Goh, Clement LK Chia

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Abstract

The era of geriatric surgery has arrived with increased global life expectancy. The need to optimize outcomes in this group of patients goes beyond traditional outcomes such as postoperative morbidity and mortality indicators. Recognizing risk factors that impact adverse surgical outcomes such as frailty and sarcopenia, individualizing optimization strategies such as prehabilitation and a multidisciplinary geriatric surgical service have been shown to improve postoperative outcomes and help the older surgical patient regain pre-morbid function and maintain quality of life. There needs to be a concerted effort to increase awareness of this increasingly important topic in practicing surgeons around the world to meet the challenges of the aging population.

Key Words: Geriatric surgery; Risk factors; Prehabilitation; Surgical outcomes; Frailty

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Core Tip: Care for the older surgical patient should not only be focused on traditional outcomes of “time to scan, time to surgery or length of stay.” An individualized comprehensive approach taking into consideration pre-morbid function, comorbidities, personal wishes, quality of life and functional recovery should also be incorporated to ensure that care for this special group of patients is holistic and complete.

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TO THE EDITOR

The rise in geriatric surgery over the recent decade can be attributed to increased life expectancy, advances in surgical and anesthetic techniques coupled with improved socioeconomic conditions. In tandem with the population aging globally, the elderly are expected to make up almost half of Singapore's population by 2050.

Veering[1] suggested that half of the population over the age of 65 will require some form of surgery at least once in their lives. Hence, the challenge of operating on elderly patients with increased perioperative risks seems an inevitable one. The literature has shown that elderly patients fare worse than their younger counterparts in terms of postoperative complications, morbidity and length of stay after both elective[2] and emergency surgeries[3,4]. Therein explains the growing interest in optimizing postoperative outcomes for the elderly.

A myriad of studies has explored modifiable factors that adversely impact outcomes such as frailty and sarcopenia. The subsequent introduction of prehabilitation as a solution to mitigate frailty and sarcopenia was shown to be a protective strategy for postoperative complications in high-risk patients undergoing elective abdominal surgery[5]. Multidisciplinary and multimodal programs catered for the elderly have also shown a reduction in length of hospital stay in our institute[6]. Similarly, a systematic review by Bagnall *et al*[7] demonstrated that elderly patients had fewer complications and shorter hospital stay when managed within an enhanced recovery after surgery program as compared to conventional care. In terms of emergency surgery, the National Emergency Laparotomy Audit has also reported improved outcomes in the elderly secondary to increased perioperative geriatrician input within their laparotomy pathway.

Last but not least, the adoption of a specialized geriatric surgical service promises to align team members to a common goal, promote productivity and communication and foster ownership to prevent fragmentation of elderly care[8]. The aforementioned strategies may continue to improve conventional measurable outcomes in elderly patients undergoing surgery. However, it is of essence to understand that the process of recovery for the elderly commences at the time of diagnosis and does not cease until the patient has regained a functional capacity similar to his or her premorbid state and has integrated back to society[9]. Lowered surgical mortality risk itself does not obviate the possibility of postoperative debilitation and loss of independence in the elderly. These intangible factors are important in the equation for geriatric surgery.

The decision to offer major surgery to the elderly should also be individualized to their premorbid function, comorbidities, personal wishes and considerations with regards to postoperative quality of life. Furthermore, multimodal programs such as the National Emergency Laparotomy Audit may overemphasize efficiency of processes given the time critical nature of the underlying etiology for emergency laparotomies. However, the geriatric surgical equation in the elderly surpasses the mere equation of "time to scan, time to surgery or length of stay." Reasonable time should be given to address the wishes and concerns of the elderly and their families while deciding on major surgery.

While the growing interest and development in the field of geriatric surgery has been heartening, the greatest challenge remains in the sustainability of these efforts. Moving forward there should be more focus on dedicated geriatric services to facilitate holistic recovery of the elderly post major surgery. Regular audits and cross institutional collaboration are ways to ensure quality care for our elderly patients.

FOOTNOTES

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