

## Comments on “Morbidity and mortality of emergency surgery in octogenarian patient”

*Comentarios a “Morbimortalidad de la cirugía de urgencia en el paciente octogenario”*

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To the Editor,

I reviewed the study by Morales-García et al.<sup>1</sup> The elderly population is increasing due to advancements in health-care services and improvements in socio-economic conditions. Consequently, there has been an increase in surgical procedures performed on octogenarians and nonagenarians. In this frail patient population, diminished organ reserves reduce surgical tolerance and contribute to increased morbidity and mortality. In emergency surgeries, the uncertainty regarding organ reserves particularly heightens the risk of unforeseen post-operative complications.

First, although frailty increases with advancing age, post-operative morbidity and mortality are more closely associated with frailty than with chronological age. It has been reported that using different frailty assessment tools for various types of surgeries may be appropriate for detecting this condition<sup>2</sup>. Therefore, utilizing frailty indices rather than chronological age is likely to yield more accurate results.

Second, it has been shown that among geriatric patients, the prevalence of hip fractures can reach up to 29.6% in nonagenarians<sup>1</sup>. However, a study by Reguant et al. demonstrated that, in elderly patients with hip fractures, delaying surgery in favor of a multidisciplinary approach to improve overall health status

resulted in reduced morbidity and mortality compared to performing emergency surgery<sup>3</sup>.

Finally, in acute abdominal surgery, variations in etiology (such as mesenteric ischemia, acute appendicitis, and volvulus) will result in variable morbidity and mortality outcomes for the different surgical procedures performed. A study has shown that in perioperative exploration, a contaminated or dirty surgical site and a delta neutrophil index  $\geq 0.05$  are independent risk factors for mortality in the octogenarian and nonagenarian populations<sup>4</sup>. Therefore, in abdominal surgery, it is crucial to specify the contamination status of cases and whether patients are in a septic state.

I congratulate the authors for their valuable contribution to the literature and look forward to their responses with great anticipation.

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### Conflicts of interest

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## Ethical considerations

**Protection of humans and animals.** The authors declare that no experiments involving humans or animals were conducted for this research.

**Confidentiality, informed consent, and ethical approval.** The study does not involve patient personal data nor requires ethical approval. The SAGER guidelines do not apply.

**Declaration on the use of artificial intelligence.** The authors declare that no generative artificial intelligence was used in the writing of this manuscript.

## References

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