Survival outcomes in patients with sigmoid volvulus

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Aims & methods

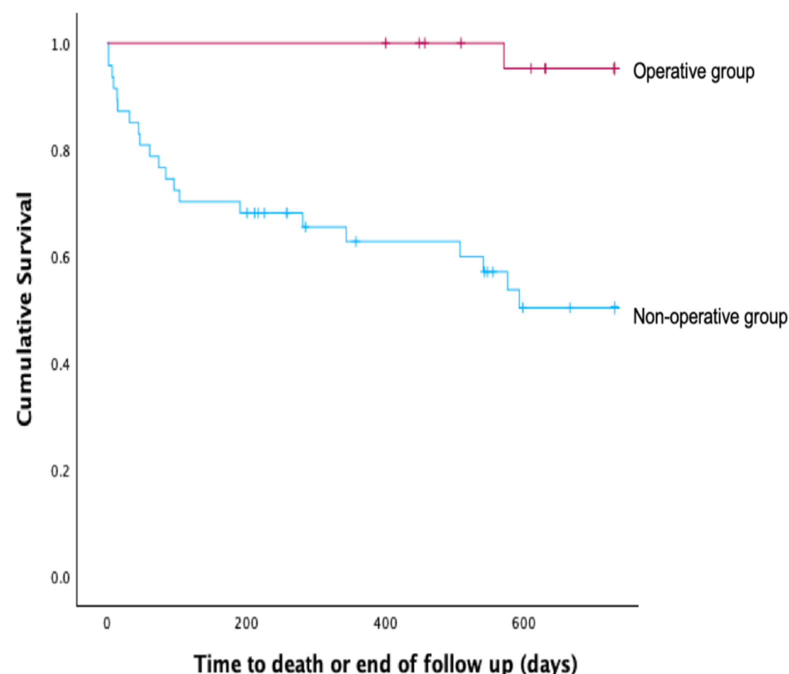
This study aimed to assess management pathways and outcomes in sigmoid volvulus (SV).
A retrospective review was performed on patients first admitted with SV between 2019 and 2023 within a tertiary-level colorectal service. Demographic, management, and outcome data, including frailty, ASA and National Emergency Laparotomy Audit (NELA) score, were collected. Comparative statistics were used to compare baseline demographics between those operated on and those not and to identify factors associated with survival.

Results

A total of 72 patients were included, median age of 78 years, with 25 undergoing surgery. After index discharge without surgery, 50 patients (88%) were re-admitted with SV at least once, with a total of 212 hospital admissions and 1952 hospital bed days at the end of follow-up. A trend towards lower age, NELA score, ASA score and frailty score was seen in those undergoing surgery, with only two deaths observed during postoperative follow-up. In those who were not palliated at first admission but did not undergo surgery at any point, the mortality rate was 42% (n = 16, median survival 545 days, median age 79), with causes of death generally reflecting conditions of frailty and not volvulus itself.

Conclusion

This study demonstrates the burden of sigmoid volvulus in an elderly population with significant mortality and morbidity. While survival was better in those undergoing surgery, this likely represents appropriate case selection reflecting underlying frailty and comorbidities in those not offered surgery rather than a protective effect of surgery. While surgery should be considered and documented at index admission, it should not be considered a panacea for the elderly and frail population.



Kaplan-Meier 2-year survival curve comparing non-operative and operative groups.

Discussion points

Surgical decision-making in this situation is complex. Most patients in this cohort were elderly with varying degrees of pre-existing frailty, rendering major surgery inappropriate for some. On the other hand, conservative management exposes patients to recurrent episodes of SV and repeated hospital admissions, which themselves are recognised contributors to deconditioning and loss of functional independence in elderly patients.

At our centre, a care of the elderly team is involved in the assessment of some surgical patients, and their input is invaluable in guiding these complex decisions. A comprehensive geriatric assessment during admission, including frailty scoring, functional baseline evaluation and care escalation planning, should provide invaluable insight into surgical fitness and inform shared, patient-centred decision-making

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