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GUEST EDITORIAL

Editorial commentary: Abbreviated laparotomy: advantages and disadvantages in South African practice

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Abbreviated or "damage-control" laparotomy, originally developed for care of severe exsanguinating trauma, is increasingly applied to emergency general surgery (EGS). The two papers in this "debate series" are timely and practical, given South Africa's high surgical burden and variable resources, both for trauma and non-trauma.[1,2]

Unlike trauma patients, EGS patients are often older, septic, and comorbid, with delayed presentation. These differences necessitate selective application rather than direct adoption of trauma protocols.

The evidence base for abbreviated laparotomy in EGS remains limited and heterogeneous, while for trauma indications and contraindications have become clearer over time. International registry data suggest survival benefits in well-selected patients, particularly through staged source control and prevention of abdominal compartment syndrome. However, morbidity from prolonged open abdomen – including fistulae, frozen abdomen, and extended ICU stay – remains substantial. The same has been identified as the challenges with trauma damage control, albeit with higher closure rates for the open abdomen with better resuscitation strategies and intensive care.

Local constraints amplify these challenges. Many hospitals lack access to commercial vacuum-assisted closure (VAC) systems, relying instead on Bogota bags or improvised devices, which have lower closure rates and higher complication risks. Pragmatic, resource-sensitive strategies are therefore essential.

These two articles appropriately stress structured resuscitation, appropriate decision-making, timely surgical intervention after initial assessment, and in cases of non-trauma damage control, early stoma formation, and caution against deferred anastomosis in septic peritonitis—where tissue oedema predisposes to leaks, compared to the less inflamed bowel of acute trauma. These decisions are especially critical in South Africa, where repeat operations carry significant system strain. The ethical issue of when to stop is also touched on and this is important in the distributive justice of a public healthcare system.

Conclusion

Abbreviated laparotomy in EGS is best viewed as a selective rescue strategy rather than an extension of trauma practice. In South Africa, both for trauma and non-trauma damage control, safe use demands deliberate patient selection, context-appropriate closure methods, and integration of critical care. Both these papers provide a useful framework while underscoring the need for locally driven research.

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