

What is the impact of a POPS review on the anticholinergic burden of emergency general surgery patients living with frailty?

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INTRODUCTION

It is estimated that by 2030, 1 in 5 patients undergoing surgery will be over the age of 75 (1). Older patients are often frail and are at a higher risk of adverse perioperative outcomes such as delirium (2). They are also at risk of having higher anticholinergic burden (ACB) scores due to multiple comorbidities and associated polypharmacy (3). Anticholinergic drugs are used to treat several conditions and are associated with a higher risk of dementia (4), delirium (5) and falls (6). The POPS team (Perioperative care of Older People undergoing Surgery) focuses on providing specialised care for this patient group, using the Comprehensive Geriatric Assessment (CGA).

METHODS



Retrospective cohort study of 50 emergency general surgery patients receiving CGA by POPS team



Calculation of ACB score on admission and discharge

Other patient factors studied:
number of medications (admission / discharge), length of stay, 4AT (delirium screening tool) and Clinical Frailty Scale (CFS) scores, Charlson comorbidity score, age, gender, cognitive impairment, diagnosis and surgery type.

Figure 1

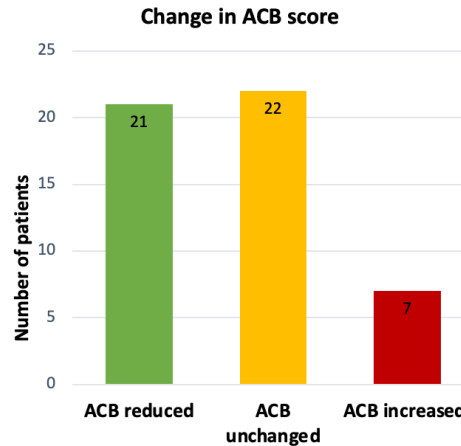
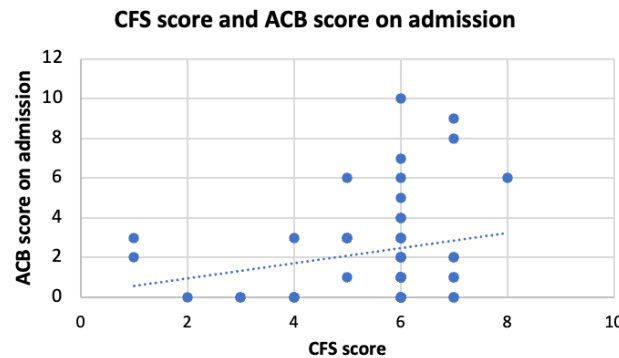


Figure 2



RESULTS

- 66% female, 34% male. Median age: 82 years
- Median Charlson comorbidity score: 6
- Median CFS score 6
- Most common diagnosis: small bowel obstruction (34%)
- 54% of patients underwent surgery
- 32% patients had delirium on admission (4AT \geq 4)
- All patients with suspected cognitive impairment or dementia had an ACB score \geq 8
- Median no. medications on admission and discharge= 9
- Median ACB score reduced from 2 to 1
- ACB score was unchanged or reduced in 86% of patients (figure 1)
- Positive correlation between frailty and delirium, and frailty and anticholinergic burden (figure 2).

CONCLUSIONS

CGA delivered by the POPS team objectively measures and reduces the ACB in this high risk group.

There is a correlation between frailty and delirium, as well as frailty and ACB.

However, in this small cohort, it is unclear whether there is a correlation between delirium and ACB.

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