

Introduction

Cognitive impairment is an important risk factor for post-operative delirium (POD) and associated with poorer outcomes¹. Awareness of the presence of cognitive impairment is vital for preoperative risk assessment and perioperative management.

Particularly for these vulnerable patients, strategies for reducing the risk of POD are sought. Medications are an example of a factor that may be addressed prior to surgery with relative ease.

Aims

Older patients undergoing elective urological and colorectal surgery were reviewed to establish:

- 1) The prevalence of both diagnosed and undiagnosed cognitive impairment
- 2) The prevalence of psychotropic (i.e. potentially harmful) medication in those with cognitive impairment.

Methods

- All patients attending a specialised preadmission clinic for frail older surgical patients over a 12-month period were screened using MMSE
- Cognitive impairment was defined as MMSE score <27 irrespective of whether a pre-existing diagnosis of dementia
- Existing diagnoses of cognitive impairment or dementia were recorded
- Medication that may potentiate delirium or falls risk were noted

Results

- Cognitive impairment was detected pre-operatively in 78 of 229 patients (34%).
- 55% of these identified patients did not have an existing diagnosis or previous identification of cognitive impairment (Figure 1).
- 47% of cognitively impaired patients were taking drugs known to potentiate delirium. The distribution of these medication classes is shown in Figure 2.
- The most common class of high-risk medication were anticholinergics (Figure 3). The most common medication was solifenacin.

Figure 1: Undiagnosed Cognitive Impairment

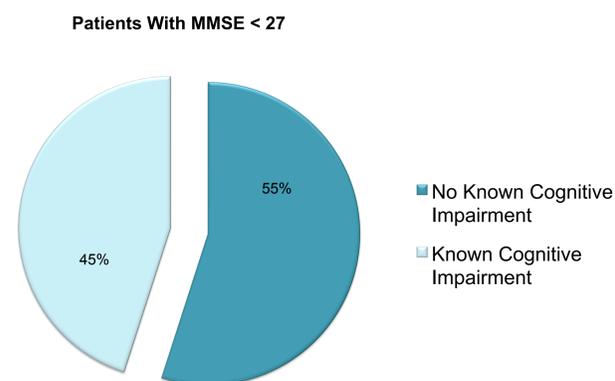


Figure 2: High-Risk Medication Taken by Patients with Cognitive Impairment

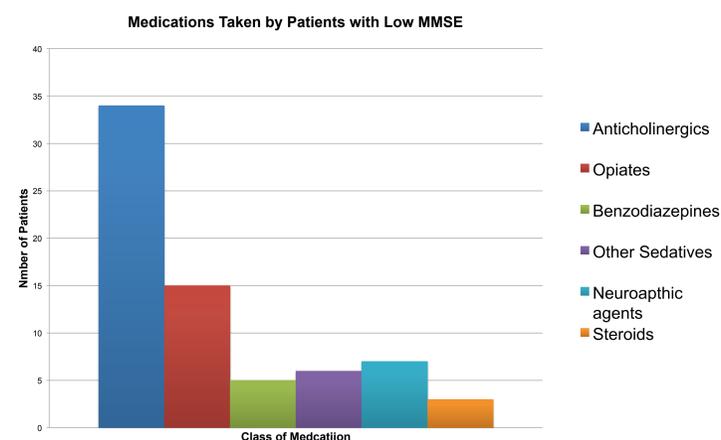
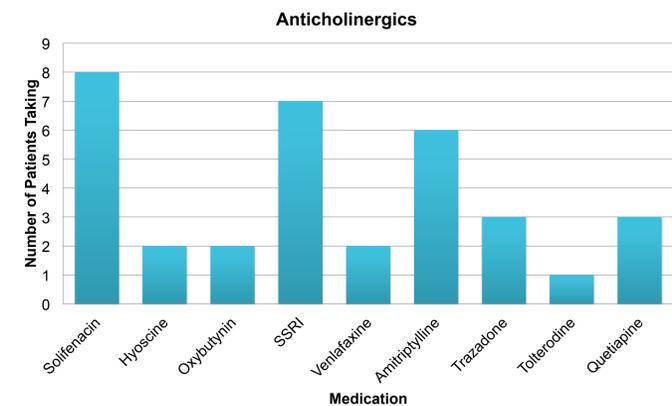


Figure 3: Anticholinergic Medications Taken by Patients with Cognitive Impairment



Conclusions

This study highlighted that cognitive impairment is common among frail older patients undergoing elective surgery; this would have been unrecognised in a significant number without proactive screening.

Around half of this vulnerable group were prescribed medications that could increase the risk of delirium and thus this was a potentially modifiable risk factor.

Future work should continue to assess the effectiveness of pre-emptive strategies to reduce delirium among this high-risk group undergoing surgery.

References

1. Watt J, Tricco AC, Talbot-Hamon, Ba'Pham, Rio P, Grudniewicz A, Wong C, Sinclair D, Straus SE. Identifying Older Adults at Risk of Delirium Following Elective Surgery: A Systematic Review and Meta-Analysis. *J Intern Med*. 2018; 33: 500-509.