

Anticholinergic burden in geriatric inpatients: a comparison of anticholinergic burden scores on admission and as an inpatient.

M Pysklo (1), M Puliyel (1)

1 - Older People's Medicine Department, Portsmouth Hospitals University NHS Trust

Introduction:

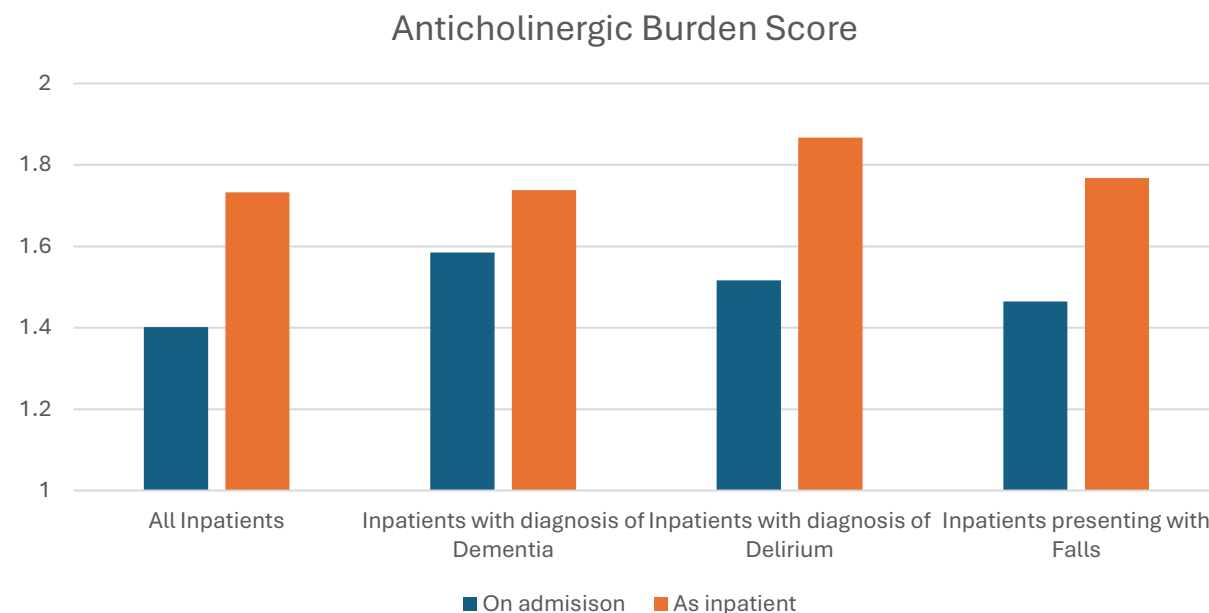
Anticholinergic medications have been associated with an increased risk of cognitive impairment, falls, and higher all-cause mortality. Falls, delirium, and dementia are common presentations leading to admissions of older patients. Therefore, there is an emphasis on reducing the anticholinergic burden (ACB) in the elderly. This study investigated if the burden changed between the points of admission and being an inpatient.

Methods:

A retrospective cross-sectional audit was conducted on geriatric inpatients (≥ 85 years or ≥ 75 years if diagnosed with Parkinson's disease as per local policy) who were present on a single day across five wards at Queen Alexandra Hospital. Patients on end-of-life care pathways were excluded. ACB scores were calculated using an online calculator (1). Admission scores were determined using medical reconciliation entries and compared with the scores on the drug chart on the day of the audit. Diagnosis of delirium, dementia, or presentations due to falls were noted. If an increase in the score was found, medication changes were reviewed.

Results:

142 inpatients were identified. ACB scores increased in 38% and decreased in 14% of patients during their admission. The average score on admission was 1.40, which increased to 1.73 while inpatient. The highest average score of 1.86 was noted in inpatients with delirium. In 86% of cases with increased scores, the change was due to 'as required' medications: most commonly morphine (46%), cyclizine (21%), oxycodone (11%), and haloperidol (5%).



Conclusion:

The findings suggest that geriatric patients are at risk of higher anticholinergic burden during hospital admissions. The highest burden was in patients with delirium. A large proportion of the increase came from 'as required' analgesia, antiemetics, and antipsychotics. This study highlights the importance of careful and thoughtful prescribing in elderly inpatients, especially regarding anticholinergic burden

1. R.King & S.Rabino, ACB Calculator, 03 July 2024, <https://www.acbcalc.com/>