

Association of anticholinergic exposure with anticholinergic burden and quality of life in a residential psychiatric ward

Background

Anticholinergics are associated with diverse adverse peripheral (dry mouth, constipation,...) and central (agitation, drowsiness...) drug events. Anticholinergics have been studied in older populations, but not in psychiatric patients. The prevalence and impact of anticholinergic usage in this context remain unclear, as well as the impact on the clinical consequences. This research aims to explore the prevalence and potential association between anticholinergic exposure and burden in adult psychiatric patients, as well as their associations with quality of life.

Aim(s)

This research aims to explore the prevalence and potential association between anticholinergic exposure and burden in adult psychiatric patients, as well as their associations with quality of life.

Methods

A prospective observational design was used. The medication use (coded by the Anatomical Therapeutic and Chemical Classification), anticholinergic symptoms (frequency and impact on patient's life) and the quality of life (measured by EQ-5D-5L) were registered every three days. Anticholinergic exposure was quantified using the MARANTE scale, and anticholinergic burden was quantified through the multiplication of frequency and impact on patient's life.

Results

Participants (n=25) mean age was 34.5 years, with 64% being male. Most common diagnosis was psychotic disorder (52.0%). Participant took a median of 2 medications (range 1-6), predominantly antipsychotics (72.0%). The median MARANTE score was 1.5, with 72.0% of patients being exposed to anticholinergics (predominantly olanzapine and trazodone). At baseline, participants reported a median of 3 anticholinergic symptoms (range 0 – 8), predominantly drowsiness (48.0%), dry mouth (40.0%) and agitation (32.0%).

The anticholinergic exposure was positively correlated with the anticholinergic burden ($R_s=0.42$, $p=0.032$). There was no difference in mean rank scores for the burden (8.7 in those with no exposure, and 14.7 in those with anticholinergic exposure, Mann-Whitney U p-value 0.068). Increasing associations between proportions of patients having a symptom and higher levels of exposure were found for most anticholinergic symptoms, albeit not significant. Throughout the participant's stay on the ward, the anticholinergic exposure and burden increased (but not significantly).

Discussion

Anticholinergic exposure and burden was high in psychiatric patients. There were several trends suggesting a higher exposure was linked to a higher burden, yet associations couldn't be confirmed due to the small sample size.

Implications and future perspectives

Targeted interventions using nurse observations of anticholinergic symptoms may help reduce the burden.

References

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