

Antipsychotic use for agitation after traumatic brain injury

Dr Adam McKay^{1,2}, Dr Jessica Trevena-Peters¹, Prof Jennie Ponsford²

¹Monash-Epworth Rehabilitation Research Centre
²Department of Psychology, Epworth HealthCare

For published article in Journal of Head Trauma Rehabilitation, see QR code



Introduction

- 50% of patients become agitated during their early recovery after TBI
- Agitation includes restlessness, mood lability, and aggression and is most common when patients are in a confused state called post traumatic amnesia (PTA)
- Antipsychotics are commonly used to manage agitation during PTA although the rates, types, and impacts are not known

Aims

- Determine the frequency and type of antipsychotics used for agitation during PTA
- To examine the relationship between antipsychotic use and agitation levels
- To provide observational data on the efficacy of antipsychotic use in reducing agitation in PTA

Methodology

- Participants were 125 patients in PTA undergoing inpatient rehabilitation following severe TBI (Mean PTA duration = 48 days)
- Antipsychotic use was retrieved from medical records; agitation was measured daily during PTA using the Agitated Behavior Scale (ABS) with scores >21 indicating clinically significant agitation

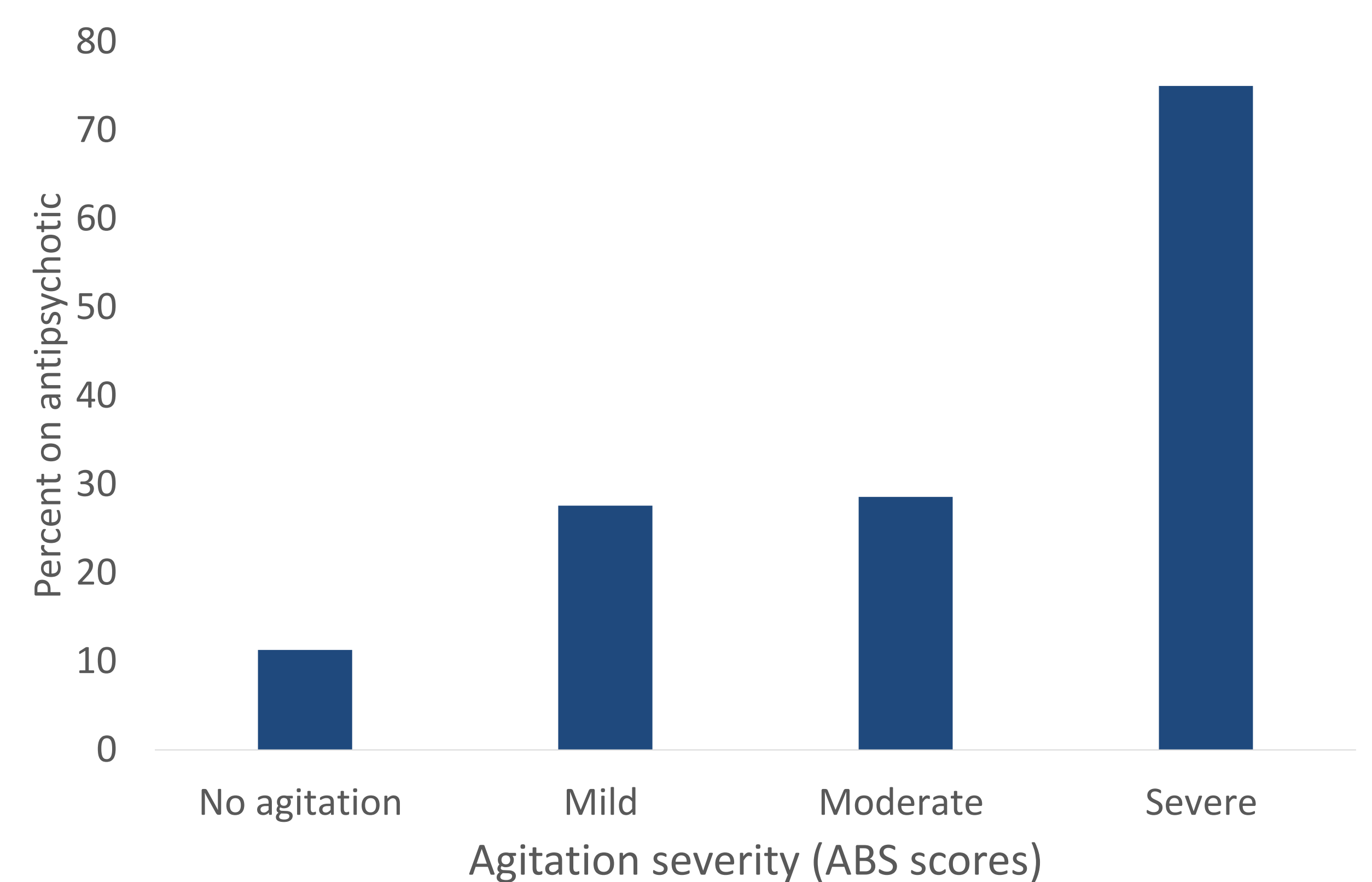
Results

Antipsychotic use – frequency and type

- 33.6% of patients were prescribed an antipsychotic to manage agitation during PTA
 - 15.2% commenced in acute care
 - 18.4% commenced in rehabilitation
- Only atypical antipsychotics prescribed
 - Quetiapine most common in acute care
 - Olanzapine most common in rehabilitation

Results (Cont'd)

Antipsychotic use – Relationship to agitation levels



- Regression analyses showed that antipsychotic use was associated with higher levels of agitation.
- Antipsychotics still used with ~30% of cases with mild agitation and ~10% with subclinical agitation.

Antipsychotic use – Observational data on efficacy

	Agitation scores in 3 days before change Mean (SD)	Agitation scores in 3 days after change Mean (SD)	Signif.
Start/increase in antipsychotics	22.5 (5.4)	23.3 (6.3)	p=.296

- Agitation scores did not reduce in three days after commencing/increasing antipsychotics (on Average)

Conclusions

- Atypical antipsychotics were frequently used to treat agitation during PTA even in cases with mild or subclinical agitation
- Uncontrolled observational data found no evidence that agitation scores reduced after starting or increasing antipsychotics
- Strong need for controlled studies to examine efficacy of antipsychotics for agitation during PTA
- Recommend using agitation measure such as ABS to monitor effectiveness of medication interventions