

People with mild cognitive impairment are at increased risk of serious injury

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Introduction

Data-linkage studies using administrative hospital data have shown that people with dementia have double the rate of injury-related hospitalisations and poorer health outcomes than those without. No previous research has explored whether people with mild cognitive impairment are also at increased risk of serious injury requiring hospitalisation.

Objectives and Approach

A major barrier to the use of administrative hospital data for undertaking research focusing on people with MCI is that MCI cannot be reliably identified from ICD-10 coded administrative data. To overcome this limitation, hospitalisation and death data was linked to data from participants (community-dwelling 70-90 year olds) enrolled in the population-based longitudinal Sydney Memory and Ageing Study (MAS). MAS participants underwent comprehensive neuropsychological assessments at baseline, then 2, 4 and 6 years' follow-up to accurately determine cognitive status at each time-period. Linkage to hospital records allowed identification of injury-related hospitalisations and outcomes for the 2-year period following each assessment.

Results

There were 335 injury-related hospitalisations for the 867 participants; 222 (25.6%) participants had at least one injury-related hospitalisation. After adjusting for age-and-sex, participants in a state of MCI had 1.7 (95%CI 1.2-2.4) times higher odds of an injury-related hospitalisation than participants in a state of normal cognition, whilst participants with dementia had 2.3 (95%CI 1.2-4.4) times higher odds. There was no difference in odds between participants with MCI and dementia.

Of the 116 hospitalisations for people with MCI, the majority (79.3%) were due to falls. Non-fracture head injuries (25.9%), upper limb and trunk fractures (13.8% respectively) were the most common injury type. There were no differences in injury type, mean length of stay, or 30-day mortality

between people with normal cognition, MCI and dementia.

Conclusion/Implications

Older people with objectively defined MCI are at higher risk of injury, predominantly as a result of falls, than their cognitively intact peers. Falls-risk screening and fall prevention initiatives may be indicated for people with MCI. Further research is required to determine which cognitive domains contribute to this increased risk.

